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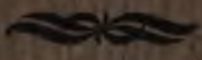
Municipal Ownership

.....VS.....

Private Corporations.



M. J. FRANCISCO.

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MUNICIPAL OWNERSHIP

VS.

PRIVATE CORPORATIONS.

WITH LEGAL AND EDITORIAL OPINIONS, TABLES AND COST OF LIGHTS AS FURNISHED BY PRIVATE COMPANIES AND MUNICIPAL PLANTS, WITH LIST OF MUNICIPAL PLANTS THAT HAVE BEEN SOLD OR ABANDONED.

CONTAINING ALSO A COMPARISON OF

ENGLISH AND AMERICAN GAS AND RAILWAY PLANTS

BY

M. J. FRANCISCO,

RUTLAND, VT.

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PREFACE.

The author commenced the investigation of Municipal Ownership in 1885 and has, up to the present time, personally examined nearly all the municipal plants in the United States and Europe. Many years practical experience in the Electric Light business has enabled him to analyze statements made in regard to the management of plants, and to judge of their efficiency.

As President of the National Electric Light Association of the United States, he has been able to secure information that could not have been obtained in any other way.

The statements made in this work regarding municipal plants were either taken from the city records or from reports which, after being made, were officially signed by the superintendent, city clerk or mayor, while in all cases the items of operating expenses and income are given as furnished by those officials.

MUNICIPAL OWNERSHIP.

IS IT BENEFICIAL TO THE TAXPAYERS? IS THERE ANY REASON FOR ADOPTING IT EXCEPT FOR POLITICAL PURPOSES? IS THERE A SINGLE PLANT THAT HAS SAVED MONEY FOR THE TAXPAYERS WHEN ALL THE FACTS ARE SHOWN?

Advocates of the system state that lights under Municipal Ownership cost half the amount private companies charge, but, they do not prove it and never have. It is easy to make such claims, but another thing to sustain them; assertions are not evidence.

Under the present plan the number of officials is limited, therefore, in order to increase the list and enlarge the field for political corruption and power, a plan has been inaugurated for governments, both state and national, as well as municipalities, to own and conduct all large commercial enterprises. If this plan could be carried out, the political offices to be filled would be multiplied a hundred thousand times. Then the great army of officials necessary to manage the Railroad, Telephone, Telegraph, Express, Gas and Electric Light, with hundreds of other branches of business that the advocates of Municipal Ownership would bring into the field of politics, would be changed at every election. This would place the country under the control of a vast army of office holders, whose only aim and office in life would be to retain their grasp

upon office, regardless of the welfare or best interest of the municipality or nation. We are told that by this plan we would secure better results with less expense. What is the record of Government, State and Municipal Ownership during the century that is closing.

In 1815, the net revenue of the English Post Office was about $8,000,000, and continued at this rate for about twenty years. The people at this time were opposing this government monopoly and the tax to sustain it, as it appeared that the charge of 14 cents on each letter resulted in an expense of postage to some London houses amounting to $50,000 per year. To avoid this, some private parties established a "penny post," but the government suppressed it, notwithstanding the number of letters sent by post was only one in ten sent by private means. This shows conclusively that the object of the English post was revenue and state serveillance rather than a means of benefitting the masses.

The United States Post Office is often cited as an illustration of the success of Government Ownership. And its advocates think that they have answered all objections to such ownership when they proudly point to the post office and triumphantly say, "is not that great enterprise an example of what the government can do in the way of managing a great business institution for the benefit of the people." They fail to show that as a business enterprise it is a losing one; that it never pays expenses and the last report shows a loss of $11,000,000. Any corporation managed as it is managed would end in bankruptcy. Instead of being an argument in favor of government ownership, it is a warning against it.

Where would the benefits of the post office be were it not for the aid of private corporations who transport and deliver the mails, the most important part of the whole process. This is not done by the government, but by private capital representing millions of money. The power of the post office department has been used as

a vast political machine for rewarding friends, and the "Boston Transcript" states that "the month preceding the presidential election the greatest percentage of removals was made of any month for four years, whole lines were stripped of their experienced men, and the creatures of politicians were put in their places."

However it may be with the post office department, it is only partly owned by the government at the best, but there is one government plant that better than any other shows what government ownership can do. It is the printing and publishing department. There we find government ownership. The United States is owner and proprietor of the largest printing and publishing house in the world, and everybody who has ever had the misfortune to come into possession of a government publication knows how the work is done. The most valuable works on travel, science, research, and history, the most expensive maps and the essential documents of government transactions are printed so vilely and bound so abominably, that after a few months they are a scandalous disgrace to any bookshelf. It is needless to describe the wretched things that everybody is ready to send to the paper mill as soon as received—books of the utmost value and importance so far as their contents are concerned. And upon this institution the government lavishes millions of dollars every year. This is a true specimen of government ownership.

Experience shows that in Europe, Australia and America state aid to Railroads has resulted in immense losses. Most of the state railways in Austria after an unsuccessful trial, were sold to private corporations for about half of their real cost. Mr. Kapp, in a letter published in "The Nation," referring to government ownership in Germany, says, "Henceforth it will be advisable for a railway employe not to vote otherwise than in accordance with the political opinions of his chief. Railroad officers, post office and telegraph clerks no

longer dare to petition in their own names to the Reichstag because they are threatened with punishment if they do so." In Italy, the government took the system into its own hands, but the gross receipts being continually less than the expenses, a special committee was appointed to investigate, and after making the most thorough and careful investigation ever made, they reported that "state railroads as a rule did not do so much for industry as private railroads; that in general their rates were higher, their facilities worse, their responsibility less, while the state railroad management was more apt to tax business than to foster it; political considerations were brought into matters of railroad construction and management in a way which was disastrous alike to railroads and politics." An instructive object lesson in government control of railways has been developed by the debates in the Brazilian Congress, growing out of the bill to lease the Brazilian Central Railway to a foreign syndicate. The Central road with its branches covers 500 miles of the best coffee producing districts of the Republic. The main line extends from Rio Janeiro on the north to St. Paul in the south, with an important branch west into the State of Minas. The road was built some years ago by the government at an expense of $150,000,000 and earned for a time $16,000,000 annually, several millions of this being clear profit. Of late years, employment on the road has been given as a reward for political activity, the partisans of one party succeeding each other with the various changes of administration. In many cases the salaries were largely disproportionate to the character of the services performed, while in nearly every case, except where experts were employed, the appointees were unfit for their places.

The debates in the Congress which disclosed these facts also showed conclusively that the road instead of being a paying investment, is steadily losing money at the rate of $2,000,000 a year.

Through the new president, Senor Pereira, who was elevated from the Vice-Presidency to the Chief Magistracy of the Republic by reason of the temporary retirement from office of President Moraes, the unsatisfactory service of the road was brought to the attention of the Congress with a strong recommendation that it be placed in the hands of private parties. It appears that a syndicate has been formed in London which will pay the Brazilian Government $90,000,000 for a ninety-year lease of the road, the latter with all improvements to revert to the Republic at the end of that period. The syndicate is entirely satisfied from an examination of the road that not only will its earnings enable it to pay the Brazilian Government $1,000,000 a year for the use of the road, but that it will still leave a handsome profit.

The investment necessary if the government owned all the Railroads, Telegraph, Telephones, Gas and Electric Companies in the United States would amount to over fifty billions of dollars and require an army of employes of over ten million men. With this vast number controlled by the political party in power, it is easy to see the effect upon business in changing this army of employes at every election.

No one can deny the disastrous result on any service of placing incompetent political tools in charge of these industries every time a change is made in the party management. The history of the country under the "spoils system" and the wild scramble for office after every election, is positive proof that the same plan would be carried out in all branches of service, while the men who had become accustomed to the business would be turned out and new politicians and bosses, utterly unacquainted with the work, appointed to take their places until another change, and so on, *ad infinitum*.

All the railways in the United States may not have been successful, but it is a fact beyond dispute that under private management the freight rates have steadily fallen

in the interest of the people and that this country commands the cheapest rates of any nation in the world.

The same conditions exist under Municipal Ownership as are found under Government or State, only on a smaller scale. Judge Dillon says, "Our large cities are encountering the perils of corruption and fraud on a gigantic scale, engendered by the large revenues and official patronage at their disposal, and the disinclination, often the steady refusal of the substantial citizens to take a controlling part in the management of Municipal affairs."

No wonder that Judge Dillon said "The legislature should be prohibited from allowing Municipal Corporations to engage in extra Municipal projects or to incur debts or levy taxes for such purposes."

Committees unacquainted with the business and with no practical experience in electrical affairs are appointed by city councils to investigate and ascertain the cost of producing the lights in cities owning plants. This is done with a view of purchasing a plant. The worthlessness of such information and the unreliability of such investigation has been demonstrated times without number. They go to the officials of other cities who have no knowledge of the science of electricity or its practical application and whose information regarding their own city plant has been obtained from employes who owe their appointment to the influence of some political wire puller whose interest it is to show a minimum expense. Statements of this kind are used as authority for the cost of Municipal Lighting, notwithstanding they are discredited by men who have made it a study of years; men who have thoroughly tested every branch of the business and are not beholden to some political boss for their position.

A party having a suit in the United States Supreme Court would not employ a carpenter to take charge of their case, neither would they go to a hod carrier for information regarding the running of the "Empire State

Express," but it is precisely upon this system that advocates of Municipal Ownership base their action.

The representative of some manufacture interviews the mayor or aldermen, furnishing a glowing account of a system by which electric lights may be produced for a mere trifle, provided they adopt his plan; then he refers them to other cities where the mayor and aldermen have been worked in the same way, knowing nothing whatever about the business or its practical application, having adopted it through the influence of some other party either working for money or a "political pull." A few politicians are hired to boom the plan and make speeches favoring it at the public meetings that are to be called. Garbled statements as to cost in other places, giving about half the expense, are provided. In this way the taxpayers are hoodwinked into voting for its adoption and the sale is completed. The agent then starts for another city to repeat the operation and refers the aldermen in this new field to the last place which he has worked, informing them that after a long and thorough investigation, his plan was adopted.

The fact that one city pays double the amount for the same grade and make of apparatus paid by another, indicates that the price of aldermanic influence was greater in the former than the latter city, but the taxpayer furnished the money to pay for the plant as well as all money spent in buying aldermen's votes.

The taxpayers in many places where municipal plants are found (who are furnishing lights to private parties at a price less than the actual cost of producing them) do not seem to realize that the masses are paying a tax to make up this expense and loss to the city, for the benefit of a few citizens who use these private lights. A large proportion of the people in a city who do not use electric lights are taxed in this way for the benefit of a few who desire the luxury in their residences or places of business.

The political record of this country shows conclusively that the constant change caused by the triumph of either party must destroy all interest in the enterprise by those in charge, knowing as they do that they are there only during the time that elapses between elections. The politician who wins will reward his friends by placing them in charge regardless of the fact that they have had no experience in the business. In this way the mechanical and other details which must be carefully watched and guarded in order to make the enterprise a success are neglected and the taxpayers wonder why the mysterious power called electricity eats up so much of the public money.

A College professor without practical experience or knowledge of the business published a text book for use in schools, in which on page 302 he made the statement that the cost of electric lights, where the city owns the plant, was 33⅓ per cent less than when lights were furnished by a private company. As an illustration he cited the city of Rutland, Vermont, as a sample, stating that the private company compelled the city to pay $280 per lamp per year, and upon this basis makes his saving of 33⅓ per cent in favor of Municipal Ownership.

What are the facts in *this* case? The city quoted, where he says lights cost $280 per year, have only paid on an average for five years, $89.50 per lamp per year, burned every night until midnight, and this, too, with the poorest quality of soft coal, costing $3.50 per ton.

As the writer has checked every lighting bill paid by the city during the above time, he knows whereof he speaks. Still the statement made in this text book, in which the cost of lights furnished by the private company is given at $190.60 per lamp per year more than was paid, has been copied and sent broadcast as an illustration of the benefits of Municipal Ownership and an argument for its adoption.

There are many things which must be considered in connection with an electric light plant when a city under takes to furnish their own lights. They must assume all responsibilities and the contingent liabilities connected with the operation of one of the most dangerous and complicated business plants in the world. Under this plan, when the engine, dynamo or other apparatus wears out or breaks down, the expense must be paid by the city. If a person is killed, it is the city who must pay the damage. When suits are entered for large amounts, it is the taxpayers who must meet the loss, and not the private company. When lightning destroys several dynamos, they must be replaced at the expense of the taxpayers. When storms destroy poles and lines, the city must pay for the new ones; and the damage by one storm in New York was more than the entire cost of lighting the city. When boilers explode, the city must pay the damages and replace them. When the station burns down, the city must meet the loss. When fly-wheels burst, causing heavy losses, the city must lose it, and the taxpayer foots the bill. These are not imaginary contingencies. Private companies have had to meet them, and they are liable to occur any day.

The property of any citizen can be held for an execution against the city for injuries caused by a municipal plant, no matter if it amounts to thousands of dollars, and thus he might be deprived of his most valuable personal rights and liberties. If electric light companies furnish the lights, they must meet such claims and protect the city from loss, and the court records show that they have paid heavy damages on this account.

You never find such expenses or items included when the advocates of Municipal Ownership report the cost of lights; neither do they charge them in the electric light account. But the private corporation must meet them, and it is a part of the expense of the business.

The suit of John W. Clary against the Municipal Electric Light Company, in the Kings County Supreme Court, before Judge Pratt, for $50,000 damages, was called for trial. The company supplies a portion of Brooklyn with electric lights, and the plaintiff was employed as a "night trimmer." He went up a pole at the junction of Myrtle avenue and Broadway to trim a light. The insulation on the wires had been burned off, and the shock of electricity he received threw him to the street and broke several bones, rendering him a cripple for life.

The electric light companies suffered a very heavy loss through the falling of wires and poles in First Avenue, Friday night. The loss to the Manhattan, the Brush, the East River and the United States Electric Light Companies, it was said yesterday, would aggregate $120,000.—[New York Herald.

In the suit of Ruddy against the Newark Electric Light Co., the jury brought in a verdict for the plaintiff of $12,000, who was injured by a wire of the Electric Company.

A verdict for $7,500 was last week rendered against the Brush Electric Company of Baltimore, Md., in favor of Mrs. Alice B. Ray and Emily M. Ray, the widow and daughter of William F. Ray, who was killed by a live wire at Cline's bicycle establishment on West Baltimore street, where he was employed as salesman. As reported at the time, Mr. Ray had stepped outside the second-story window to fix a sign, when he caught hold of the wire to steady himself and was instantly killed. Five thousand dollars of the verdict goes to Mrs. Ray and $2,500 to her daughter.

Five residents of Chicago have filed in the Lake County, Indiana, Circuit Court damage suits against the Calumet Electric and the South Chicago City Railway companies, and ask an aggregate of $200,000 in damages

for injuries received in a collision of cars of the two companies at Seventy-fifth street.

George E. Demorest has begun suit in the Superior Court at Tacoma, Wash., for $25,000 damages for injuries sustained by plaintiff by being knocked from one of the poles of the Steilacoom line by a shock from the trolley wire while acting as a lineman.

One storm cost the electric light companies half a million dollars. Hardly a month passes that suits are not entered against private companies for damages caused by accidents from electric wires.

UNFAIR COMPARISONS.

In the list of cities quoted by the advocates of Municipal Ownership, the price per year in a place using water power, and only running 20 nights a month, until midnight, is compared with the prices of private companies furnishing cities with an all-night light, using steam power and burning all night and every night in the year, with coal at $4 per ton; and then the reason given for the difference in price is because in one city the municipality own the plant, and in the other it is furnished by a private company. The tendency is but too common to jump at such conclusions from data hastily and indiscriminately gathered.

Nothing is easier than to make a theoretical argument in favor of Municipal Ownership, but any attempt to put these theories into practice evolves the fact that the theories in them depend entirely upon a state of things that does not exist; their arguments are in contradiction of the actual experience of practical men and the best scientists of this generation, who have not only made the subject a study, but demonstrated the same by testing it every night for years.

Many advocates of Municipal Ownership admit that the profits of the private corporation represent the only

difference between the cost of municipal and private lighting.

In view of this admission, it is only necessary to examine the report of the Massachusetts Commissioners, which shows that of 60 companies doing business in that state only 32 could pay a dividend. But they paid over to the municipalities in taxes $215,616.67. With such a record under the best expert management, we are told that municipalities can save money by owning the plants and having them controlled by political bosses.

This is conclusive evidence that the electric light companies are not being paid a proper price for lights, and if a private company can, with all their care, skill and close business management, barely pay expenses at present prices, how can a municipality be benefitted by engaging in the business and having to rely for service and business sagacity upon politicians and shifting municipal managers, inexperienced in the business and changed at every election? Yet under such conditions with private companies, many of them furnishing the lights at barely cost, they are branded as monopolies.

Nine municipal plants in Massachusetts have 1041 customers who take commercial lights. Here we have over 20,000 people taxed to furnish 1041 of their citizens with the luxury of electric lights at less than it costs to produce them. The man who cannot afford to use them is taxed to make up the loss on his neighbor's lights.

There are 205 towns in Massachusetts whose population exceeds 1500; 183 of these have taken no action towards a municipal plant and only two towns in the state have taken action for the first time during the past year. There are only ten towns in the entire State run ning municipal plants, and two of these own the lines and lamps but purchase the current from private companies. It will be noticed that in towns owning the plant the rate of taxation is higher than in those towns which do not own a municipal plant.

It is evident that the taxpayers of the state of Massachusetts are learning the truth regarding Municipal Ownership, as 45 towns that voted for the first time to establish a plant, all but 13 voted to abandon the project after an investigation, and when a second vote was required, notwithstanding a majority had voted in favor of it the year before at the annual meeting. They have found that where municipalities own the plant, there are many ways by which it may appear as though the cost had apparently been reduced, besides those of true economy. Officials see no necessity of inaugurating strict business methods, when a plausible statement that there is a reduction satisfies the public.

The statement has been made repeatedly that the system of Municipal Ownership was increasing at an alarming rate, and its advocates would like to have the public believe that it was becoming almost universal and exculding private companies.

Upon an examination of the last quarterly report published, we find the following facts:

In California there are 230 arc lights furnished by municipalities, while there are 9,941 furnished by private companies. In Illinois the municipalities furnish 3,052, and private companies 17,044. In Indiana there are 1,114 produced by the municipalities, and 10,478 by private companies.

Iowa follows with 806 municipal lights, and 5,028 by private companies.

Massachusetts has 994 furnished by Municipal Ownership, and 19,714 from private companies.

Missouri gets 669 by Municipal Ownership, and 7,489 from private companies.

New York has 880 delivered by municipalities, and 39,377 from private companies.

Ohio contributes 1,711 from Municipal Ownership, and 18,187 from private companies.

Pennsylvania has 1,541 furnished under Municipal Ownership, while private companies furnish 29,689.

Here we have nine of the most important states in the United States, and find only 11,177 arc lights furnished by municipalities, and in the same territory private companies are furnishing 156,947 arc lights.

Nearly all the arc lights furnished under Municipal Ownership are in small villages that are not large enough to sustain a private company.

PRICES, PAST AND PRESENT.

When electric lights were first started, everything was an experiment and very expensive. Carbons cost the private company at that time $60 per thousand; now they can be bought for $10, and everything in the same ratio. Is there any fairness or justice in comparing the prices charged by private companies when the business was an experiment, with the present cost of producing lights?

By referring to the list of prices charged by private companies as given by the advocates of Municipal Ownership, you will find nearly all of them are prices that were charged several years ago and are not now in force. For instance, Boston is reported as paying the private companies $180 per year, while Boston only pays $129.75 per year for 2,000 candle power lamps burning all night every night in the year. What is the result? The private company furnishes Boston with a light for 3,939 hours at a cost of .0324 per hour, 617 candle power per hour for one cent.

Danvers, another Massachusetts town, owns the plant and burns 1,200 candle power lamps 1,500 hours per year, costing .05 per hour, and they are only getting 240 candle power per hour for one cent.

Boston is getting nearly three times as much for its money from the private company as Danvers is producing from its own plant.

The chief engineer of a prominent manufacturing company said he did not like to sell to city plants for the simple reason that they did not operate the machinery to the best advantage—"they let everything go to rack." He says: "I speak from personal observation of a great number of city plants."

The theory that municipalities can do it for less money is easy to talk about, but when it comes to actual business they do not and cannot do it for the same price even. Any business enterprise to be conducted successfully ought and must be carried on by men who are financially interested in it, and who feel in their pocket the cost of every expenditure. The fact that in Philadelphia gas actually cost the consumer 36 per cent more than the average cost of an equivalent amount in twelve of the largest American cities, shows conclusively that Municipal Ownership is not the true remedy.

IS IT CONSISTENT?

Detroit has a new plant and all the modern improvements and every facility that money can provide, and first-class management, in fact, everything in favor of producing a cheap light, still by their own report it costs them $100 per lamp per year. You will find scores of statements made by the advocates of Municipal Ownership in which they claim that such and such cities with antiquated and dilapidated machinery, poorly managed by a political boss, can produce the same lights for $50 per year that cost Detroit $100.

MUNICIPAL OWNERSHIP IN ENGLAND AND SCOTLAND.

We are told continually that in England and Scotland Municipal Ownership is a great success.

As an illustration we will refer to some of the gas works. The records show that private corporations made for every ton of coal carbonized 11,187 feet, while the municipalites made 9,951 feet, being an average of over

12 per cent in favor of the private companies. Again, compare the gas lost between the meter and the works and we find that the municipal plant lost 8.46 per cent, while the private company only lost 7.87 per cent.

The profit which a gas company can make depends somewhat upon its residuals. Reports show that the municipal corporations' average per cent was 43.72, while the private companies average 68.72 per cent. The cost for labor to carbonize coal enough to produce 1,000 feet of gas for the municipal corporation was 7.28 cents, and for the private company was 5.69 cents.

Again, coming to the one important part of the entire business, viz., profit, we find that the average price paid by consumers to the municipal corporation was 61 cents; while they only paid the private company 57⅔ cents.

The advocates of Municipal Ownership intimate that nearly everything in England is owned and operated by the government. What are the facts?

There are in England 203 municipal gas works with a capital of $128,121,630, and there are 429 private companies with a capital of $225,098,710.

The receipts of the 203 municipal gas works are $32,329,955, while the receipts of the 429 private companies are $64,914,780.

Therefore, in number of gas works in England there are about two private companies to one municipal plant. London, Liverpool, Dublin, Newcastle and many other important cities are supplied by private companies.

ELECTRIC AND STREET RAILWAYS, IN ENGLAND AND SCOTLAND.

If we were to believe all the statements made by the advocates of Municipal Ownership we should have nearly all the railways in large cities in foreign countries owned and operated by municipalities, while the fact is that it is an exceptional case where the municipality owns and operates the plants.

The reports to Parliament show that in Great Britain and Ireland there are 153 street railways. Of this number 116 are operated and owned by private companies; 31 are owned by the municipality and leased to private parties, while only 6 are owned and operated by the municipalities. Of these cities, only one, Glasgow, claims that the enterprise is a successful one. The socialists tell us that the profits in Glasgow are so large that the entire expenses of the city are defrayed without any taxes.

FROM THE LORD PROVOST OF GLASGOW.

The following communication answers this statement fully:

"The Lord Provost of Glasgow has received communications from all parts of America desiring confirmation of of a statement to the effect that the citizens of Glasgow would be free from all taxes or rates in consequence of the profits derivable from their gas, water, electric lighting and other undertakings of the government.

I have accordingly been requested by the Lord Provost to inform you that this statement has no foundation in fact. There is no probability of this city being exempt from taxation."

JOHN S. SAMUEL,
City Chambers.

PLANTS IN GLASGOW AND THE UNITED STATES COMPARED.

Boston has five times and Brooklyn seven times as many miles of track as Glasgow.

In Glasgow the fare is 1.85 cents per mile and the average trip is one mile, while in Boston and Brooklyn a passenger can ride eighteen miles for five cents. Thus showing that the rates when operated by private companies are lower than when operated by the municipality.

In addition to this, in Glasgow they pay their conductors and motor men from 85 cents to $1.12 per day,

while the West End road in Boston pays their conductors and motor men $2 and $2.25 per day.

The socialists have a great deal to say about the profits in Glasgow. An examination shows that the West End Street Railway Company of Boston pays into the treasury in taxes 28 per cent per year more than the entire operating profits of the Glasgow municipal system for a year, and Brooklyn paid twice over as much in taxes as the Glasgow operating profits.

MUNICIPAL OWNERSHIP IN ENGLAND.

Before the English government bought the telegraph system, the private corporation had been making a profit on the plant, but the government has never made a profit since, and the taxpayers would have saved millions of dollars if the government had not attempted the management of this business enterprise.

Every one who has had experience confirms the statement that the service and facilities in Glasgow do not compare with those of private companies in this country. In no enlightened country is scientific knowledge so poorly paid for as in England. In one municipal plant the electrical engineer, managing the entire business, gets $650 per year. The assistant is paid $260 per year.

Sheffield, England, had a street railroad operated by a private company and paid from 5 to 8 per cent dividends. The city took the business, and under municipal management the property did not even earn the interest upon the capital invested, and this, too, in a city with 17,000 persons per mile of track.

Huddersfield has operated a street railroad for fourteen years and has lost in that time $311,000, and in Plymouth, Huddersfield and Sheffield and other cities, boys from fourteen to sixteen years of age and paid $2.50 per week, are employed as conductors.

Would the authorities in American cities permit private companies to employ such conductors, or would the labor organizations consent to such wages.

How is it with other countries in Europe where we hear so much about their success under Municipal Ownership?

In Germany there are but four and these are in the small places. Cities like Berlin and Hamburg are supplied by private companies; in Switzerland only three; none in France, Austria, Hungary, Belgium, Italy, Russia, Spain and Holland.

There are but fourteen cities in the world that operate their street railways.

The above facts show conclusively that Municipal Ownership in Europe is not the brilliant success that its advocates in this country would have us believe.

Another feature of the two systems is the decrease in in prices.

In Philadelphia, where the benefit of Municipal Ownership has been fully tried, the decrease has been only 35 per cent; in Richmond, 50; while in New York, where gas is furnished by a private company, it has been 54½; Baltimore, 63½; Cincinnati, 49; Boston, 66; showing the decrease in price in every case has been larger when private companies furnished the gas than it has been when furnished by the municipal authorities.

Another feature of Municipal Ownership that requires consideration is the purchase of the plant. It is well understood that in all matters of this kind there is a large bonus charged over the usual cost, and that the municipality pays for the apparatus and the bonus as well.

The fact that in the reports of municipal plants the cost of the plant per lamp installed varies from $150 to $600 is very conclusive evidence that certain places afforded fat picking, especially if we find that the

places where the two extremes exist are using the same make of apparatus.

DESTROYING PRIVATE CAPITAL.

A number of public-spirited citizens in a city invest a large amount of money to organize a private company. They establish the business, and in many ways benefit the community by their enterprise and by contributing their proportion towards sustaining the public burdens. As soon as this venture indicates a success, the municipal authorities establish an opposition plant, levying a tax to build it and for funds to sustain it. *Thus not only placing the municipality in competition with the private corporation, but taxing its stockholders for the purpose of procuring money with which to destroy the value of their own property.*

How would it seem to the mayors and aldermen of those cities who are advocates of "Municipal Ownership" if while they were engaged in the dry goods or grocery business, or operating a mill, running street cars or supplying the citizens with coal, if the city authorities should decide to start an opposition establishment next door to their own property, thus destroying the business in which they had honestly invested their money?

When the municipal plant, owing to ignorance or corrupt management, is unable to produce the lights at the price they could be furnished by the private company, a tax is laid to make up the loss caused by the city indulging in a business speculation which has proved unsuccessful. *That is, after destroying the private company, any property the stockholders have left is to be taxed to make up the loss that the city sustained in ruining their business,* as it is well known that this kind of competition will be the inevitable ruin of the private company.

These are the ethics and this the economic plan of the advocates of Municipal Ownership. What do the honest people of the United States think of municipalities becom-

ing wreckers of private enterprises? Would business men or capitalists be apt to select a city for investment where this plan of spoilation had been adopted and carried out?

There is still another feature of this business that is well to consider. Under the authority and sanction of the legislatures of many states, private capital amounting to millions of dollars has been invested in the enterprise of electric lighting. The benefit that municipalities have received from this capital is enormous and it is a question whether private capital thus locally invested, under the sanction of the state, can be jeopardized and endangered by the actions of municipalities who are subject to and under the control of the state.

ENGLAND, GERMANY AND FRANCE PROTECT PRIVATE CAPITAL.

In England this matter is fully settled and no municipality can operate its own plant, if by so doing it will interfere with any local or private company authorized by Parliament. They do not permit such high-handed business on the part of the municipalities. A city where a private plant is established cannot act upon the question of purchasing it until the local company has had 42 years to secure a fair return for their money. Also if the city purchase the business of the local company it must take all their property at a fair market value. This gives security to capital and encouragement for its investment in a city or town.

Berlin is quoted as the model city government of the world. Still the private company that furnishes the lights are granted by their contract with the city the privilege for thirty years, and at the end of this time the city can purchase the plant if they wish. The city of Berlin considers that having invited the investment of the capital of their citizens, the persons who have taken the risk and funished it should be protected.

In Paris the exclusive contract is given to one company for eighteen years and the city binds itself to protect the parties who have invested this capital. All these foreign governments realize that it is sound public policy to protect legitimate investments and encourage their citizens to engage in all public enterprises by protecting their private rights and capital.

How is it in this country? Often you see the mayor and council of cities advocating and advising the purchase of a plant by the city for the purpose of competing with the private company, composed in many cases of its own citizens who have been induced to invest their money in the undertaking.

Ex-Gov. Russell of Massachusetts voiced the people when he stated before a committee "That the matter involves a most serious question of public policy, namely, whether it is wise, necessary and safe to reverse the policy that has governed towns and cities for 250 years and allow them to go into these enterprises with all the hazards, risks and liabilities that attend the investment of money in private industry. I am one of those who believe it is the duty of government not to crush out individual enterprise and energy, but to aid it. I believe in the principle of government helping men to make the most of themselves, and industries to make the most of themselves, but not in a paternal government to which we must all look for leave to act, or think, or speak. And I believe on that principle it is of doubtful expediency for a state or government to undertake to control in this way private enterprises."

BURDENS IMPOSED.

In addition to the tax to be levied to pay the interest and principal, there is the annual expense of running the plant and repairs to be made, thus placing a burden upon its citizens which cannot be overcome in years, besides driving would-be citizens away on account of the heavy

taxes caused by these debts. The history of this kind of management is plain, and has resulted in imposing grievous burdens for years and, in some cases, repudiation and its attendant consequences. In certain states the losses thus entailed have led to the passage of laws prohibiting such transactions in order to shield posterity from disaster, as it has been nothing else wherever the experiment has been tried.

INCREASES TAXES.

That an effort to sustain a municipal plant increases taxes heavily has been demonstrated time and again.

Paris, Tenn., installed a plant, and before this was done the tax rate was forty-five cents on the $100, and now it is $1 on $100, more than doubled, and not a dollar of sinking fund to pay her bonds.

Union City, Tenn., purchased a plant and issued bonds in payment. The tax rate before bonds were issued was $1.10 on the $100, now it is $1.40, and even at this rate did not provide a sinking fund for the bonds and they had to levy a special tax of 10 cents on the $100 for that purpose.

Humbolt, Tenn., had the same experience. Tax rate was only $1 on the $100 before bonds were issued; now it is $1.50, and they had to levy a special tax to pay bonds. When the plant was started there was $3,500 cash in the city treasury. This was all used and $4,000 of 8 per cent warrants were issued. These are not isolated cases; the same conditions will be found in nearly every place where they have installed municipal plants.

REBATES.

Cities paying private companies the prices indicated are furnished with first-class lights, free from any and all liabilities and know just what the expense is. They also know that there is no chance for juggling or municipal bookkeeping. If the contract calls for a certain number

of lights at so much per light any taxpayer can tell just the amount of the bills.

When private companies furnish the lights and any accident occurs preventing lights burning, the company must rebate to the city, and these rebates in many cases amount to many thousand dollars, but if the municipality own the plant there is no rebate, while the ordinary expenses of the plant go on as usual.

DEPRECIATION.

The question of depreciation has been fully investigated, and the opinion of a large number of the best electrical engineers in the United States obtained, also the opinion of the highest authority in Europe, together with that of a number of electricians who are managing plants for municipalities, and the unanimous report of *all* was that 10 per cent depreciation was very low, while the committee appointed by Congress placed it at 10 per cent.

It has been demonstrated beyond doubt by companies who have been in operation for a period of ten years or more, that no matter how much care may be given to the plant, the apparatus cannot be used beyond a certain time, if economical and satisfactory results are to be obtained.

Experience has shown that the ordinary life of dynamos, outside construction, engines and boilers is ten years, The building will show a longer life. Therefore, an amount sufficient to renew the plant at the expiration of its usefulness must be set aside, and that it is not safe to calculate on less than 8 per cent on the entire plant, and in many cases this will not be sufficient.

The depreciation of a plant by use is as much a part of the cost of operation as is the coal bill or pay-roll and should be included in every report of cost. If this is not set aside year by year from the beginning, future taxpayers will be robbed for the benefit of those now in position to be benefitted by the robbery.

When the apparatus becomes worn and is old and antiquated, no company can afford to use it on account of the heavy per cent of loss in producing the lights. For this reason, little or nothing can be obtained for the old machinery and the value of the plant when renewed would be no greater than when first erected.

In the hearing before the Select Council of Philadelphia, the testimony of the best experts in the country was taken, and their estimates were 10% per annum. The superintendent of the municipal plant at Marietta, Ohio, and the Ypsilanti plant say that 10 per cent is not any too much to allow for depreciation.

The experts employed by the mayor of Springfield, Ill., made it 10 per cent.

The committee appointed by Congress made it 10 per cent.

The mayor of Decatur, Ill., said after several years experience with a municipal plant, that if 10% was allowed for repairs and then 10% added for depreciation, it would not be too much.

SALE OF APPARATUS.

The actual sale of apparatus discloses the true condition.

Wabash, Ind., used dynamos and lamps costing $18,000 for six years and then sold them for $30.

The author sold a dynamo after seven years that cost $4,000 for $500.

A gentleman stated to the Select Council in the course of their examination that he sold an electrical apparatus that cost $3,800, after using it five years, for $600.

Alameda, Cal., sold apparatus costing $20,000, after seven years use, for $350.

The cases where municipalities, after a trial of Municipal Ownership have sold their plant confirms the statement that in no case should there be less than 10 per cent set aside for depreciation.

No sane or fair-minded man will, with the corruption and fraud practiced by politicians at the present day, attempt to prove that it is for the best interest of the taxpayer to place faith in the honest or conservative management of any enterprise which can be manipulated in the political arena, or for the advancement of the men in power. It is the universal experience that a man pays closer attention to business details and economy where he has the most at risk.

In all municipal enterprises there is lack of attention to mechanical and other details which must be carefully watched and guarded in order to make it successful. Human nature is the same the world over and will be forever. The best guide of what the future has in store is a comparison and study of the past. The past records of municipal plants have been shown and their methods illustrated. The histories of New York, Philadelphia and many other cities are samples of such methods and sufficient evidence to satisfy the taxpayers for all time of the wisdom of not extending or increasing the number of officeholders in any city.

Judge Cooley, Interstate Commerce Commissioner, says: "There seems, therefore, to be strong, if not controlling, reasons whenever the supply of a public convenience can assume the form of a private and continuous business, for permitting it to take that form and for granting to individuals the necessary franchise for the purpose."

He further says, "that this species of legislation has been exceedingly mischievous in its results, that it has created a great burden of public debt on which, in a large number of cases, the anticipated benefit was never received, and that, as is likely to be the case where municipal governments take part in projects foreign to the purpose of their creation, it has furnished unusual facilities for fraud and public plunder, and led almost at last to discontent, sometimes even to disorder and violence."

PRACTICAL EXPERIENCE BETTER THAN THEORY.

Theories are good, but actual results obtained by practical application and experience are the only reliable data upon which to base any statement relating to the cost of street lighting. In every case the records show, where all the facts are given, that it is for the best interests of the citizens and taxpayers to contract with an electric light company for lighting the streets of any city.

The time for municipalities to own and conduct commercial enterprises has not arrived, and will not until mankind are born into a world where politicians and aldermen protect taxpayers and refuse boodle; when employes with no interest in the business except to aid political bosses and draw their salaries can conduct the business more economically and successfully than men who have, perhaps, every dollar of their fortune depending upon its success. When, in fact, the millennium arrives, and the whole human family are transferred to some eternal city lying beyond the shores of time. Until that period arrives let all cities confine their business to regulating and governing, leaving commercial industries with their hazards and losses to individuals and private corporations.

COST OF LIGHTS FURNISHED BY PRIVATE COMPANIES.

The following table is a sample of lighting contracts by private companies scattered nearly all over the United States; as many are given as space would permit.

The last two columns are based upon the actual hours lights are burned. This gives a true comparison of lights, whether burned all night, or on midnight or moonlight schedule, as all are calculated by the hours in actual service.

The variation in yearly price is caused in many cases by the price of coal, some companies only paying 30 cents per ton, while others are paying $8 per ton, also some companies run the lights a few nights each month, and others every night and all night, and some burn 1200 while others use 2000 candle power lamps.

By reducing it in each case to the price paid per hour it gives a basis for a fair comparison between various styles of lamps and computing the candle power per hour furnished, shows just what candle power is received for the one cent paid in each case.

Name.	Cost per hour.	Candle power per hour for 1 cent.	Name.	Cost per hour.	Candle power per hour for 1 cent.
Atlanta, Ga.	.0226	884	Buffalo, N. Y.	.0456	287
Augusta, Ga.	.0192	1041	Bath, Me.	.0298	671
Adrian, Mich.	.0253	790	Battle Creek, Mich.	.0535	373
Allentown, Pa.	.0266	752	Bellair, Ohio	.02	1000
Alpena, Mich.	.0513	389	Berkley, Cal	.052	384
Amsterdam, N. Y.	.0261	459	Bethlehem, Pa	.0321	623
Auburn, N. Y	.0461	433	Biddeford, Me	.0535	373
Annapolis, Md.	.024	833	Birmingham, Ala.	.0288	694
Ann Arbor, Mich.	.041	487	Braddock, Pa	.0186	1075
Asheville, N. C	.0256	781	Bradford, Pa.	.02	1000
Augusta, Me	.02	1000	Brazil, Ind	.0296	675
Binghamton, N. Y.	.0262	763	Bristol, Conn.	.048	290
Bridgeport, Conn	.0272	441	Baltimore, Md.	.0342	584

Name.	Cost per hour.	Candle power per hour for 1 cent.	Name.	Cost per hour.	Candle power per hour for 1 cent.
Bucyrus, Ohio.....	.0456	438	Greenfield, Mass	.0507	236
Burlington, Iowa.....	.0456	438	Greenville, Ohio.....	.0225	886
Burlington, N. J	.0256	781	Harrisburg, Pa.....	.0226	884
Butler, Pa.....	.024	833	Hammond, Ind.....	.0235	851
Charleston, S. C.....	.0456	287	Hazelton, Pa.....	.024	833
Cambridge, Mass	.0266	451	Highlands, Col.....	.0547	365
Cincinnati, Ohio.....	.0226	884	Homestead, Pa.....	.0209	957
Cleveland, Ohio.....	.0252	793	Hornellsville, N. Y...	.0266	752
Columbus, Ohio.....	.0342	584	Huntingdon, Pa.....	.0288	694
Carlisle, Pa	.024	833	Huntington, W. Va...	.0266	752
Cedar Rapids, Ia.....	.024	833	Hutchinson, Kan.....	.0456	438
Charleston, W. Va....	.0328	365	Indianapolis, Ind.....	.0388	515
Chattanooga, Tenn...	.0232	862	Independence, Mo....	.0561	356
Chippewa Falls, Wis .	.0226	884	Iowa City, Ia.....	.0616	324
Circleville, Ohio	.0342	350	Ishpenning, Mich	.0288	694
Claremont, N. H.....	.032	375	Ithaca, N. Y.....	.0292	684
Clinton, Ia.	.040	487	Jefferson City, Mo ...	.0327	611
Columbus, Ga.....	.0388	515	Joliet, Ill.....	.0266	752
Camden, N. J	.0368	543	Jackson, Mich.....	.0223	896
Chillicothe, Ohio	.02	600	Kansas City, Mo	.0545	366
Conshohocken, Pa.....	.0256	781	Keene, N. H	.048	416
Council Bluffs, Ia.....	.0383	522	Knoxville, Tenn.....	.0215	938
Dallas, Tex	.0456	438	Louisville, Ky.....	.0224	892
Dayton, Ohio.....	.0266	751	Lynn, Mass	.0389	514
Des Moines, Ia.....	.0336	595	Lowell, Mass.....	.0342	584
Duluth, Minn	.0266	751	Lancaster, Pa..	.0237	843
Danville, Ill.....	.0365	548	Lafayette, Ind.....	.0301	398
Evansville. Ind.....	.0253	790	Leavenworth, Kan ...	.0438	456
East Liverpool, Ohio.	.025	800	Lexington, Ky	.0273	732
Eau Claire, Wis.....	.02	1000	Little Falls, N. Y.....	.0266	752
Elyria, Ohio.....	.04	500	Lockport, N. Y	.0192	1040
Fort Wayne, Ind.....	.0547	365	Manchester, N. H....	.0306	653
Fargo, N. D	.032	625	Memphis, Tenn.....	.032	625
Findlay, Ohio.....	.0185	1081	Mobile, Ala.....	.0185	1081
Fond du Lac, Wis....	.0383	522	Macon, Ga.....	.0266	752
Fort Madison, Ia.....	.0383	522	Minneapolis, Minn...	.057	350
Fostoria, Ohio.....	.024	833	Mansfield, Ohio.....	.0266	752
Fresno, Cal	.0222	900	Michigan City, Ind...	.04	500
Galesburg, Ill.....	.0362	552	*Moline, Ill.....	.0382	528
Galena, Ill.....	.0493	405	Mount Vernon, Ohio.	.0225	888
Gardiner, Me.....	.0512	390	Nashville, Tenn	.0243	823
Genoa, N. Y.....	.0547	365	Newark, N. J...	.0262	763
Glens Falls, N. Y.....	.0367	651	Northampton, Mass ..	.036	333
Gloversville, N. Y....	.0547	219	New Britain, Conn. ...	.0415	481

Name.	Cost per hour.	Candle power per hour for 1 cent.	Name.	Cost per hour.	Candle power per hour for 1 cent.
North Adams, Mass ..	.0266	451	St. Louis, Mo.....	.0199	1000
Omaha, Neb.....	.032	625	St. Paul, Minn.....	.0184	1086
Olean, N. Y.....	0266	752	Syracuse, N. Y	.0243	823
Oshkosh, Wis	.031	387	Sandusky, Ohio.....	.0233	858
Oswego, N. Y	.0216	925	Saratoga Spr'gs, N. Y.	.0264	757
Ottumwa, Ia.	.0213	938	Schenectady, N. Y	.0311	643
Peoria, Ill.....	.0261	766	Sedalia, Mo	.0347	576
Portland, Ore	.0276	724	Sheboygan, Wis	.0253	790
Pittsburg, Pa	.0256	781	South Bend, Ind	.024	833
Providence, R. I	.034	588	Steubenville, Ohio....	.02	1000
Parkersburg, W. Va..	.0256	781	Streator, Ill...	.024	833
Passaic, N. J.....	.0293	682	Sunbury, Pa.....	.0173	1156
Perth Amboy, N. J...	.0233	858	Terre Haute, Ind.....	.017	1176
Petersburg, Va	.0161	745	Trenton, N. J.....	.0262	763
Piqua, Ohio.....	.024	833	Tampa, Fla.....	.032	625
Pittsburg, Kan.	.024	833	Tiffin, Ohio	.024	833
Plymouth, Pa.....	.024	833	Uniontown, Pa.....	.0186	1085
Port Jervis, N. Y.....	.024	833	Van Wert, Ohio.....	.0266	752
Peru, Ind	.022	909	Washington, D. C....	.0292	684
Pueblo, Col.	.0352	568	Wiklesbarre, Pa.....	.0266	752
Quincy, Ill.....	.0342	584	Waterbury, Conn.....	.0292	684
Reading, Pa.....	.028	714	Watertown, Mass.....	.0456	263
Richmond, Ind.....	.024	833	West Bay City, Mich..	.0453	441
Rock Island, Ill.....	.0236	847	Williamsport, Pa.	.0213	938
Rome, N. Y	.0223	896	Wilmington, N. C....	.0493	405
Saginaw, Mich.....	.028	714	Yonkers, N. Y.....	.0292	410
Salt Lake City, Utah.	.0465	430	Youngstown, Ohio....	.0292	684
Scranton, Pa.....	.0243	823	York, Pa.	.0223	896
Sioux City, Ia.....	.0253	790	Zanesville, Ohio	.0342	584
Springfield, Ohio	.0237	843			

*City owned plant and sold to private company.

A LIST OF MUNICIPAL PLANTS AND THE COST OF LIGHTS PER HOUR AND CANDLE POWER PER HOUR FURNISHED FOR ONE CENT.

Reducing the cost in each place to the hours lights are burned and to the candle power furnished per hour for one cent, places each upon the same basis and indicates the actual cost of lights and return made to the city, whether they are using a 1200 or 2000 candle power lamp.

The fact that the yearly cost of a lamp is low, is no criterion that the light is cheap. The reason for the small yearly expense may be the burning of a 1200 candle power light a few hours during certain nights in each month.

This is shown by comparing High Point, N. C., where the annual cost is only $56.19, with Macon, Mo., where it is $114.50 per year. When the cost per hour is calculated, it is found that at High Point it is .0449, while at Macon it is only .0305.

Notwithstanding the yearly cost at High Point is only $56.19, while at Macon it is $114.50, still the actual cost of the light at Macon is less than at High Point, when we consider the cost per hour of service.

Name.	Cost per hour.	Candle power per hour for 1 cent.	Name.	Cost per hour	Candle power per hour for 1 cent
Alleghany, Pa.....	.0257	739	Bowling Green, Ky ..	.0418	478
Aberdeen, Miss.....	.0327	611	Bangor, Me.....	.0168	714
Arlington, Minn.....	.21	55	Chicago, Ill	.044	454
Ashtabula, Ohio.	.0408	490	Crawfordsville, Ind...	.0369	542
Alexandria, Va.....	.0231	519	Chambersburg, Pa ...	.0278	719
Alameda, Cal.....	.103	194	Coldwater, Mich	.035	571
Adrian, Minn.....	.0882	136	Council Grove, Kan ..	.0779	154
Aurora, Ill	.0317	627	Danvers, Mass.....	.05	240
Bay City, Mich.....	.0354	564	Dunkirk, N. Y	.037	540
Batavia, N. Y.....	.0408	490	Danville, Va	.0184	652
Bloomington, Ill	.0545	366	Decatur, Ill	.09	222
Blue Island, Ill.....	.0451	443	Detroit, Mich ... ...:	.0264	757
Braintree, Mass.....	.0785	161	Easton, Pa.....	.445	449

Name.	Cost per hour.	Candle power per hour for 1 cent.	Name.	Cost per hour.	Candle power per hour for 1 cent.
Elgin, Ill.....	.586	341	Meadville, Pa	.0281	711
Emans, Pa	.0637	313	Marshalltown, Ia.....	.0373	321
Fairfield, Ia.....	.07	285	Madison, N. J.....	.0670	294
Fredonia, N. Y.....	.0524	381	Middleboro, Mass	.049	244
Frederick, Md	.0435	495	Montpelier, Ohio.....	.0378	520
Galion, Ohio	.0511	391	North East, Pa.....	.0386	518
Galveston, Tex.....	.0557	359	Oxford, Ohio.....	.0413	484
Grand Ledge, Mich .	.11	181	Peabody, Mass	.0266	451
Goshen, Ind.	.0513	389	Painsville, Ohio.....	.038	315
Griffin, Ga	.0343	583	Paris, Ill.....	.0523	382
Hannibal, Mo	.0540	370	Portsmouth, Ohio....	.0481	247
Herkimer, N. Y.....	.0572	349	Portland, Ore.....	.0348	574
Herrington, Kan			Reading, Mass	.0951	126
Huntington, Ind	.0491	408	Rushville, Ind.....	.075	266
High Point, N. C....	.0449	267	St. Clairsville, Ohio...	.0269	743
Halletsville, Tex	.0452	442	St. Charles, Mo	.0421	475
Holland, Mich.....	.0592	337	Shelby, Ohio	.0562	355
Jamestown, N. Y	.0235	510	Savannah, Mo.....	.10	120
Jacksonville, Fla....	.037	540	South Norwalk, Conn.	.051	235
Lewiston, Me. (W. P.)	.0234	854	Santa Cruz, Cal	.0759	263
Little Rock, Ark	.047	255	Sharpsburg, Pa.....	.0366	230
Lisbon, Ia.....	.0566	353	Statesville, N. C.....	.0355	338
Lyons, Ia.....	.0773	155	Staunton, Va.....	.0497	241
Marietta, Ohio	.028	715	St. Peters, Minn	.0594	336
Mattoon, Ill.....	.0333	600	Topeka, Kan	.549	364
Madison, Ind.....	.0696	287	Winterset, Ia.....	.06	200
Miamsburg, Ohio....	.0434	460	Weatherly, Pa.....	.11	181
Marseilles, Ill.....	.0232	861	West Troy, N. Y	.0306	653
Martinsville, Ind....	.0464	431	Wakefield, Mass.....	.0851	141
Marshall, Mich.....	.0450	444	Ypislanti, Mich.....	.0664	298
Macon, Mo.....	.0226	884			

AVERAGE COST BY THE TWO SYSTEMS.

An examination of the tables discloses the fact that in nearly every case the cost per hour where contract is made with a private company is less than when furnished by the municipality; also that the candle power for one cent furnished by the private company is more than that produced by the municipal plant.

An average of the cost by private companies and representing every state in the United States shows cost per hour to be .0252 cents, while they furnish on an average 654 candle power per hour for one cent. The same analysis of the municipal plants, taken from every state in which municipal plants are operated, shows that the average cost per hour is .0359 cents, while they only furnish on an average 404 candle power per hour for one cent.

This shows that the private companies are furnishing the lights on contract on an average of .107 cents per hour less than the municipalities can produce them, and also furnishing 250 candle power per hour more for one cent than the municipal plants.

Another very significant fact is disclosed by late reports from municipal plants, viz.: that the expense of maintaining the plant is increasing each year.

Notwithstanding this increased cost in municipal plants, the price charged by private companies for lights has decreased every year, until at the present time many companies are furnishing the lights at less than the cost of producing them.

PRICES REPORTED BY CITIES TO VARIOUS COMMITTEES.

	Little Rock.	Chicago.	Ypsilanti.	Aurora.
Mobile	$51.10	$83.00	$35.79	$67.99
Scranton	47.50	55.60	23.61	56.00
Milwaukee	81.00	73.00	37.00	67.99
Stubenville	60.00	54.75	40.00	60.00

Above are the prices reported by four municipalities to four different committees, who were investigating the feasability of a municipal plant in their respective cities. No two reports from the same place agree when furnished to different parties.

This list could be continued indefinitely and show the same results. Why is it that when the committee at Mobile ask for cost of running lights in Little Rock, Chicago and Ypsilanti, they receive a different price from that furnished the committee at Milwaukee, Scranton, and other places?

They tell the Milwaukee committee that it cost $37 per year per lamp in Ypsilanti; then they say to the Scranton committee that cost in Ypsilanti is $23.61, while Steubenville is told that cost in Ypsilanti is $40.00, and the same variations are found in reports from Chicago and Little Rock. If the records and accounts are properly kept and true statements are made, why do not all reports agree?

MUNICIPAL PLANTS SOLD OR ABANDONED.

Places that have tried the plan of Municipal Ownership and after a practical test abandoned it after losing thousands of dollars:

XENIA, Ohio, plant cost $35,000; sold it for $10,000, making a net loss to the city of $25,000, and have made a contract with private party to light the city for 20 years.

MARCELINE, Mo., plant cost $16,000; after sinking thousands of dollars have abandoned the business and sold the plant for $6,000 to private parties who are operating it.

MICHIGAN CITY, Ind., plant cost $10,000; sold it for $2500, and made contract with private parties for ten years at $75 per lamp per year run until midnight. They estimated that it cost $110 per lamp per year when the city owned the plant.

TIPTON, Iowa, plant cost $2500; soon after started entirely destroyed by fire; no insurance—total loss; taxpayers sunk $2500 in the enterprise.

HOPE, Ark., after a fruitless attempt to run a plant and losing a large amount, sold it to private parties and made a contract for 25 years.

GREENVILLE, S. C., could not run plant, and sold it to private parties and made a contract with them to run the lights for 15 years at $100 per year.

CARALTON, Ga., lost money and then sold plant to private parties, making a contract for incandescent lights at $20 per year.

STOCKTON, Kan., could not raise money to run the plant and abandoned it and asked for aid in selling it.

MOLINE, Ill. The mayor says in reply: "I beg to say that this city operated its own electric light plant in connection with the water works for several years. But about four years ago the plant was sold and light was contracted for at $84 per lamp, moonlight schedule. I gathered a good deal of statistics which proved that electric light plants could be operated by cities for less than two-thirds the price generally paid to private corporations."

This mayor gathered the usual array of reports showing that cities were producing lights for about two-thirds the price charged by private companies. Believing these reports, the city invested $15,000 and attempted to carry out the wild statements of the theorists. They found it could not be done, and they sold the plant for $8,000, thus sinking $7,000, and were glad to contract with a private company and pay them $84 per lamp, burned on a moonlight schedule

A notable instance of the failure of a municipality to operate a business enterprise is shown by the city of Cincinnati. They attempted the management of the Cincinnati Southern Railway and made a failure, and sold the business at a very serious loss.

TACOMA, Wash., invested a large amount in a power plant, could not run it successfully and made a contract for a term of years with a private company and turned over their plant to that company who are now running it.

BRAINERD, MINN., spent thousands of dollars for a plant. It was a failure, and the taxpayers voted overwhelmingly in favor of selling it in order that they might save taxes and get a good service.

It is all the more remarakble as Brainerd has a fine water power to run its dynamos. The report of the Special Committee of the Common Council on this subject, says :

"We respectfully recommend that the question of the sale of the plant be submitted to a vote of the electors of this city.

The proposition meets with our approval. Our reasons are as follows:

If the plant is not sold the city must, in a short time, expend large sums of money to make it serviceable.

Second, the ownership of the plant by the city has not proven profitable to the city, and without criticising anybody, we must say the service has been poor and not satisfactory.

Third, we may be reasonably certain that we shall get better service if the plant is sold.

Fourth, it has been the policy of this city, as well as of all progressive cities, to encourage capital within reasonable bounds and those who are willing to employ it in building up such industries as will be beneficial to the communities in which they operate, and by transferring this plant to the said company we are of the opinion that the city will not only get rid of this large indebtedness, but will also show that we as a community are willing to extend a helping hand to those who are trying to build up our city."

GRAVESEND, L. I., invested $120,000 of the taxpayers' funds in a municipal plant, and it was sold recently for $30,000.

STOCKTON, Mo., believed the stories about the money to be saved by a municipal plant and invested their money. The dream has passed, and they are selling the plant.

AUDUBON, Iowa, tried Municipal Ownership and failed, and have turned the property over to a private party. When they attempted to transfer it, they found the city had no power to dispose of the plant without action of the legislature. The private company are running the plant and furnishing the lights.

LEON, Iowa, invested $10,000 in a plant and at the end of two years they pointed with pride to the surplus they claimed they were accumulating. They spent $2000 for repairs and then the citizens voted to shut down the plant and sell it rather than make the additional repairs required.

When they attempted to transfer the property they found the city could not without authority from the legislature. So they left it

for the private company to run, and it is not difficult to see what the loss must be under these conditions.

HUDSON COUNTY, N. J., invested about $100,000 in a municipal plant. It was not a success. Numerous complaints regarding the inefficiency of the county employes in charge of the plant and of frequent breaking down of the machinery have been made.

The failure of the plant to do the work expected disgusted all parties and they voted to abandon it and have contracted with a private company for the lights.

The N. Y. Advertiser says we commend the freeholders for deciding to abandon the job of lighting the Boulevard, and if this decision had been reached three years earlier it would have saved the county $65,000. The freeholders should have kept politics and political heelers away from the lighting plant.

MADISON, Ind., tried the plan and failed, and voted to sell the plant.

BUCHANAN, Mich., defeated a proposition to buy an electric light plant because the electors found on investigation that such plants, in almost all cases, were a source of expense and not profit, and that the temptation to municipal officers to make it a political machine was a continued source of trouble, and the cost of running was far above all estimates.

NATIONAL RAILROADS OF NICARAGUA TO BE SOLD.

Consul Wieslke at Managua informs the state department that the Nicaraguan government has determined to send a commission abroad to sell or lease the national railroads. He has advised the commission to visit the United States first, and suggests that American capitalists might find this a good opportunity to make an investment.

LOGANSPORT, Ind., tried it and found that in a short time the allowances that had to be made for repairs and maintenance added to the running expenses, exceeded receipts by large sums annually.

The allowances made by the council, upon the recommendation of the electric light committee, for repairs and maintenance, foot up over $1,500, which would mean an expenditure of something like $20,000 for the year. Unless the cost can be reduced, the expense of maintaining the plant and operating it is going to exceed the receipts. The complaint is made that the plant is already short of power, and that before the city can realize on its investment, much more powerful engines will have to be provided. The *Pharos* gets this information from a gentleman connected with the department.—*Logansport Pharos.*

EXPERIENCE OF MUNICIPALITIES WHO OWN PLANTS.

MUNCIE, Ind. The superintendent says that as a general rule they are unsatisfactory.

METROPOLIS, Ill. Superintendent says municipal plants are not as economical as they should be and are not managed as they should be. It seems as though there is no one to go ahead and carry out things.

HERRINGTON, Kan. Superintendent says a good man cannot do much in a year.

WELLS, Minn. Superintendent says: I do not believe in Municipal Ownership of electric plants, as too much political influence is brought to bear on it and the plant suffers from it both as to management and economy.

HOLLAND, Mich. President says: I am inclined to the opinion that there would be a chance for corruption and appointment of favorites and for political influence.

JACKSON, Ohio. Superintendent says: This plant is run by a committee from the council which is changed every year, so we get new management every year that does not become acquainted with the work until changed; the attention is not paid to details as would be by a private company.

OXFORD, Ohio. City Trustee says: We believe that they can be operated in towns say of 3,000 people, but not in larger on account of political affairs being so often mixed up with them.

De GRAFF, Ohio. Manager says: A committee of the Council in nine cases out of ten will put their judgment up against a man of years of experience in the management of plants.

WILMINGTON, Ohio. Superintendent says: In my experience no plant should be run by any municipal corporation, for there are so many that want to be boss, and too many free lights.

GRAND HAVEN, Mich. The Board and Council have quarreled over the City Electrician who has resigned; the Board accuses the Council of desiring to put men in charge of the electric light plant who are related to certain Aldermen. The Council accuses the Board of creating liability without reference to the City Council, and have ordered the Treasurer to pay no bills unless approved by the Council.

QUAKERTOWN, Pa. Superintendent says municipal electric plants would be a success if politics could be kept away from them.

TOO SMALL FOR PRIVATE COMPANIES.

Most of the municipal plants are in small places that cannot support a private company. There is not a municipal plant in Alabama where they have a private company, and only one in Arkansas and one in California.

Illinois has only seven municipal plants in cities where there are private companies, and Indiana six, while Iowa has only three and Kansas one, Kentucky two.

Massachusetts has not a single municipal plant in a city where private companies are doing business. Michigan has only four, while Min-

nesota has none, Missouri one, New Jersey none, and the whole state of New York has only three municipal plants where there are private companies doing business, North Carolina none, Tennessee none, Wisconsin none, Ohio has only six and Pennsylvania four in cities where private companies are operating.

This shows that a large proportion of the municipal plants are started because the villages where they are located cannot procure lights in any other way.

LEGAL AND OFFICIAL OPINIONS.

Mr. Ivins says: "It is because we fear our army of officeholders that conservative men look upon the paternal and regulative tendency of governments with undisguised dread."

Mr. Charles Waring, while in favor of the state purchase of railways in Great Britain, holds that in the United States it would be utterly out of the question on account of the attendant political evils.

Hon. Charles O'Connor, in his masterly article on democracy, says: "By means of general laws admitting of no favoritism or partiality, all requisite facilities through corporate forms or otherwise, should be afforded to individuals for conducting every description of lawful business. This should include banking, insurance, establishing roads, canals, docks, fairs or markets, and furnishing supplies of every description, and like objects. Under this head there is the greatest room for progress in effectively applying the democratic principle, so as to prevent any needless action by the government, or the employment of its officers in any affairs that experience might show could be safely committed to individuals as a business."

Mr. John Stewart Mills, referring to the abuse of the powers of government, says: "The mischief begins when, instead of calling forth the activity and powers of individuals and bodies, it substantiates its own activity for theirs."

Prof. Bryce in his Am. Com., says: "That the Philadelphia gas ring controlled at least 20,000 votes, and the number of men employed in a gas plant is very small when compared with the number employed in other lighting works."

W. T. Burt of Wheeling, West Va, a city which has run its gas plant since 1870, says: "Owing to politics, our city has not been successful in getting good, competent, public servants. Unfortunately, our civil service is not separate from politics."

John Mitchell of Richmond, a member of the Board of Aldermen of that city, says: "All positions are filled by the spoils system. Republicans rigidly excluded."

W. W. Cook of the New York Bar, says: "If our large cities should manage their natural monopolies their governments would become El Doradoes of political freebooters and mountebanks."

Hon. Seth Low, ex-mayor of Brooklyn, and Pres. of Columbia College, says: "Few American cities have exercised so great a competency in the business already in their hands as to justify a very strong presumption that they would manage lighting works."

Ex-Mayor Fitler says: "A little mismanagement here, a little extravagance there, would change the dividends of the private companies to municipal deficits, and when our opponents advocate municipal operation of street railway lines, they advocate an experiment, the effect of which they know absolutely nothing about, and have no possible means of calculating."

Prof. Gray says: "It is beyond any doubt whatever, much more in harmony with the theory and philosphy of democratic government than Municipal Ownership."

Prof. Whitney says: "That an engineer loses his professional dignity and standing by entering the service of a city. Every new position placed at the disposal of the city officials tightens the grasp of the 'Ring Boss' upon the treasury of the city."

Prof. H. C. Adams says: "Facts regarding city financiering are simply appalling. It is not too much to say that every rule laid down by the science of financiering has been disregarded by our cities. The entire business has been so veiled that the taxpayers have been in entire ignorance as to what has been going on."

A. S. Hewitt, Ex-Mayor of New York, says: "However well disposed the officers of a city may be toward the proper performance of their duty, they are necessarily constrained and overruled by the exigencies of partisan interests and are compelled to reward political service by public office."

An opinion from Harvard University: The experience of the most sagacious men in the nation shows that Municipal Ownership is not conducive to the best interest of any city. Professor Ashley of Harvard University, who was at Toronto at the time the changes were made in their municipal management, says: "I am thoroughly in favor of private management. I came to this opinion after four years experience of Toronto city government, starting originally with a very strong leaning toward municipal management."

Prof. Rosewater of Columbia College, says: "If we turn now to the cost statistics of electric lighting under Municipal Ownership of the plant we strike a complication no less serious. At the very beginning of every such investigation we find ourselves in the chaos of American municipal bookkeeping. When two cities employ the same system of accounts, when in the same cities the reports of the different departments furnish irreconcilable data, the statistician must seek to extricate himself as best he can. It would scarcely be stating the case too strongly if you should say that out of the probable 150 municipalities owning their own electric lighting plants, not five could present an intelligible showing of their operation for the period of one year. The

blame for this does not attach entirely to the city officials, for conditions exist in many localities which render a clear financial account a thing next to an impossibility."

PRESIDENT HOPKINS OF THE NATIONAL STREET LIGHTING ASSOCIATION OPPOSED TO IT AT THIS TIME.

Henry Hopkins of New Haven, President of the National Street Lighting Association, is opposed to the Municipal Ownership of electric light plants. And this conclusion has been reached, he says, after years of careful study of the comparative merits presented by the operation of public service systems by private contract and by municipalities, and from a comparison of statistics of relative economy and efficiency collated from all the larger cities of the country. Mr. Hopkins said if politics could be eliminated from the proposition of Municipal Ownership, it might prove to be a desirable system of supplying public service, but as long as politics is permitted to enter into the administration of public service, there is little to be gained in placing expensive electric, gas or water plants in the hands of untutored and inexperienced politicians.

Mr. Hopkins is strongly opposed to the Municipal Ownership of electric light plants, or gas plants either for that matter.

"When I first became interested in city lighting," he said, "I was enthusiastic over municipal light plants, and especially over municipal electric light plants. I thought it was the only way a city should be lighted. I have devoted several years since then to the collection of statistics, and have made a very careful and exhaustive study of the question. And as a result I have come to the conclusion that there is nothing whatever in it.

Politicians do not make good electricians, and I regret to say this country is not yet ready for municipal electric light plants.

Now you tell me you have an ordinance pending before your council now for the erection of a municipal electric light plant. Well, in the first place, if the ordinance is passed you will have to issue $200,000 or $300,000 bonds. This is just that much property taken from the tax duplicate, for if the plant were not erected by the city it would be erected by private capital and, of course, it would be taxable. Then there is the interest on these bonds, in itself a large item. So you start out with two very burdensome losses.

But the most important consideration of the Municipal Ownership of electric light plants is that by the time the bonds issued for the erection of the plant are paid, the machinery and apparatus, always expensive, are totally out of date. Electricity is making rapid strides, and a plant that was modern 10 years ago is long since out of date now. And what is the result? The plant that cost $300,000 to build 10 years ago is little better in comparison with modern equipment than a pile of rubbish.

But the most serious objection to Municipal Ownership at this time is the fact that all municipal service plants are controlled by politics. As I said before, politicians or ward heelers do not make good electricians. You cannot get the best electricians to run municipal electric light plants, when political pulls are the accepted recommendation. Then again, there are so many changes in administrations that it would be almost impossible to keep good men in charge, if they were to be secured. A ward heeler has no business handling expensive electrical machinery, when the mere turning of a switch the wrong way would entail a loss of thousands of dollars. There may come a time when Municipal Ownership may be profitably established, with politics eliminated, but the country is not ready for it yet, and, therefore, I am opposed to it now.

How about Municipal Ownership of water works? Well, I expected you to ask that, for it is used invariably as an argument in support of the Municipal Ownership of electric light plants. But let me tell you on the start that there is absolutely no relation whatever between the two. Water descends from the sky; it comes up through the ground; it is everywhere; it is man's in abundance. All that is required to make it ready for general consumption is the construction of the channels through which it is conveyed, and the force that impels it along. It runs through trenches, through hollow logs, or, more modernly, through iron pipes. All that has to be provided is the power to give it motion. It does not have to be made by costly machinery, and there is not the same progress in pumping machinery there is in electrical appliances. Municipal waterworks, for aught I know, are all right. They would be, I am sure, were there no politics in their management, but municipal waterworks and municipal electric light plants are two very different things."

DECISION OF THE SUPREME COURT OF MASSACHUSETTS.

In this opinion Justices Field, Allen, Knowlton, Morton and Lathrop, say: "We are not aware of any necessity why cities and towns should undertake this form of business any more than many others which have always been conducted by private enterprise, and we are not called upon to consider what extraordinary powers the commonwealth may exercise or may authorize cities and towns to exercise in extraordinary exigencies for the safety of the state or the welfare of the inhabitants. If there be any advantage to the inhabitants in buying and selling coal and wood for fuel at the risk of the community, on a large scale, and on what has been called the co-operative plan, we are of the opinion that the constitution does not contemplate this as one of the ends for which the government was established or as a public service for which cities and towns may be authorized to tax their inhabitants.

On the other hand, Justice Holmes holds that the offer by municipalities to the public of coal and wood without discrimination, is as much a public service as the supply of water, gas and education, and Justice

Barker holds that the proposed measure is constitutional, if the necessities of society can be met only by its adoption, and unconstitutional if such measure is merely an expediency for the trial of an experiment. The decision of the court must, however, be felt by the Nationalists as a serious setback for them.

THE CONVENTION OF MAYORS AND ALDERMEN.

Mr. Burdett of Boston in an address at the street lighting convention in New Haven, proved very conclusively that the reports from municipalities were not reliable. He said:

"The figures which are given out as to the comparative economy of Municipal and Private Ownership of lighting plants are generally unreliable and almost always misleading. I will illustrate this statement by something which has happened here, which illustrates the folly of relying upon figures ordinarily given out by advocates of Municipal Ownership. Last night we had an interesting discussion with a gentleman from Alleghany (superintendent of the municipal plant), from which it appeared that on his statement the municipal lamps of that city cost $71.67 each per year, but it appeared later that coal was but a dollar a ton there, and they used from sixteen to eighteen thousand tons per annum. The cost of coal, of course, plays a very important part in arriving at the cost of lights. Here the cost of coal is at least $3. Comparing the cost of light there with the cost of production here, we therefore have to make an addition of $2 a ton on coal—at least 16,000 tons, or a total of $32,000. 74 per cent of the extra cost of the coal amounts to $23,680, or an average of $25.60 per arc lamp, which must be added to the stated price in order to compare it with the prices in this section of the country. When I add that item alone I carry the cost up to $97.21 per lamp instead of 71.67 as stated.

Another striking illustration of the figures usually given out upon this subject may be found in the various articles in the Arena, written by a man who writes articles by the yard and uses figures by the million. But he is one of that somewhat numerous class of persons who 'know a great deal that is not so.' He indulges in tables, and one of them which he calls 'Table 10,' is a comedy of errors, and yet it has been printed widely and has undoubtedly influenced some city fathers in favor of municipal lighting. I wish I had time to give you some analysis of it, but I have not.

He compares municipal plants run by water power with private plants using coal at $4 a ton. He compares municipal lights running five and one quarter hours per night with private lights running between ten and eleven hours per night. He compares present alleged cost under Municipal Ownership with prices charged by private companies a number of years ago. And so on to the end of the chapter.

Mr. Foote of Washington, D. C., said (in answer to information requested by a gentleman from Springfield), that Mr. Hunter of Alleghany represented a municipally owned plant, and according to his

statement their lights were costing $71. He presented a statement showing the figures in detail. He also said that he had omitted from that statement certain items of expense. He also admitted that the price of coal in his town was $1 a ton. If the gentleman from Springfield (who is procuring lights of a private company) will take the difference in the price of coal between Springfield and Alleghany, he will find that the cost per lamp for Alleghany as compared with Springfield price, is higher. The Superintendent from Alleghany was also frank enough to make a statement to the effect that if New Haven was getting its lamps at $98.55 per year, when the adjustment of the account was made to correspond with the difference for local conditions that the price in New Haven is less than the price of the municipal plant in Alleghany.

MAYOR GREEN OF BINGHAMPTON, N. Y., OPPOSES MUNICIPAL PLANTS.

In his annual message to the city this year, Mayor Green of Binghamton, N. Y., addresses himself to the municipal plant question and says: "The business of electric lighting is one of recent origin, and many central stations neglect to include the contingent expenses, which expenses from the very nature of the business are in many cases larger than were expected by the most careful estimates. Then, too, from the nature of the business, the life of the apparatus is short, hence the natural desire on the part of private corporations for a longer contract, in order that the cost of renewing and maintaining the apparatus may be warranted by a known period for as long a time as possible.

We have not undertaken to compile recent statistics on electric lighting outside of New York State, but have submitted enough to convince intelligent beings that the hypocritical howl that your honorable body did the city a grievous wrong by entering into the recent contract is simply ridiculous, since the statistics submitted prove that this city receives 133 more candles per hour for one cent than the average price paid by the several New York State cities mentioned herein.

Had you favored establishing a municipal plant, it would at first have required state legislation; then it is safe to assume more than one year would have been required to locate and establish the plant. Your action in accepting the three years' proposition was, in my judgment, in the interest of economy. The city is now provided with lights at a fair price.

My experience has demonstrated that it is almost impossible to secure thoroughly reliable data from cities owning municipal plants. So much of uncertainty concerning actual and contingent expenses maintains, that it is difficult to restore order from the general chaos.

This was accompanied by figures worked out as far as possible, showing that Binghampton is getting its light cheaper than a city plant could furnish it."

Senator Loud, Chairman of Commission on Post Offices, says: "It is an incontestable fact that the government cannot conduct any line of

business as economically as an individual or a corporation can. I know of no better reason why the government should conduct the telegraph system than all means of transportation and other classes of business in the country."

REPORT OF INVESTIGATION AT UTICA, N. Y.

MORE EXPENSIVE TO TAXPAYERS.

The city of Utica, N. Y., made an exhaustive investigation of the comparative cost of lighting under Municipal Ownership and private contract. The official report to the City Council shows figures of the cost per lamp per hour of 27 cities in 20 states under Municipal Ownership, and 28 cities in 19 states under private contract. The average where the plant is owned by the municipality is .09892 per hour, and where contract is made with private company, .03699 per hour. Municipal Ownership, therefore, is nearly three times as expensive to taxpayers as private contract.

It is needless to state that Utica decided to continue to contract with a private company. These figures speak for themselves. Surely 55 cities picked at random throughout the country ought to be a pretty good indication of the general result of Municipal Ownership. Figures like these can be cited without end, but the above should be sufficient to remove any doubt as to the history of the matter and the general results under all conditions.

PRESENT OPINION.

A former advocate of Municipal Ownership has changed his mind. W. J. Buckley, the author of Buckley's Tables that have been quoted to nearly every committee of investigation, now states that after an extensive experience in city plants, he has come to the conclusion that Municipal Ownership does not pay.

REPAIRS NOT CONSIDERED IN REPORTING COST OF LIGHTS.

It is well understood that the estimates furnished to investigating committees from city authorities do not include many items of cost, neither does the estimate of the expense of operating the plant cover near all of the actual bills that always have to be paid when an attempt is made to operate a municipal plant.

This is illustrated by the statements made to the Select Council of Philadelphia by the Director of Public Safety and the Chief of the Electrical Bureau, in answer to the Chairman's questions, as follows:

The Chairman.—I wish to ask the Chief this question. In making your estimate of the cost of it, you think you have provided for a first-class plant, I suppose?

In your figures for the 2,000 light plant, you estimate that it will cost at least one thousand (1,000) dollars a year to remove ashes. Do you not have ashes to remove in your 400 light plant?

The Chief.—So very little that that item does not amount to much there. We do not consider that as worthy of special notice. It might cost a couple hundred dollars to take the ashes away.

The Chairman.—That is the difference between the city and a private company. A private company is compelled to take everything, even a fractional part of a cent of cost, into consideration. That two hundred (200) dollars a year amounts to something. I will put that down at two hundred (200) dollars, which is one-fifth of the other item. Is that fair?

The Chief.—That is about what we thought it might take; two hundred (200) dollars.

The Chairman.—You are aware of the fact that an engine is liable to get out of order. What charge have you made here in your maintenance account, if any, for repairs to your engines?

The Chief.—None, sir.

The Chairman.—And you have no item here at all for repairs to your boilers?

The Chief.—No, sir.

The Chairman —They may be subjects of repair?

The Chief.—Yes, sir.

The Chairman.—You have made no provision for that. Now, as to your armatures, whether they would burn out soon or last a long time, and as to your commutators and your segments, what do you say?

The Chief.—Those armatures might run a long time, and might give out soon.

The Chairman.—Now, you must charge yourself with that. You know the mechanical construction of the lamp, do you not?

The Chief.--Yes, partially; but probably I have not had as much experience with it as some other people.

The Chairman.—Do you not know that the holders are liable to get out of order, and the brushes, and that your globes may be broken?

The Chief.—Yes; the globes will sometimes last a year without being broken.

The Chairman.—Do you not think it wise business policy to charge an average amount per day on that item?

The Chief.—I have not provided for that in that estimate.

The Chairman.—You think those ought to be provided for, do you not—your engines, boilers, dynamos, lamps, and so on?

The Chief.—Yes

The Chairman.—What water would you consume in the operation of your plant?

The Chief.—A charge for city water? There is no provision made for that, because it does not cost the city anything.

The Chairman.—I beg your pardon; it does cost the city something. does it not?

The Chief.—Well, it might cost them something.

The Chairman.—Then do you not think you ought to be charged the same amount of money for water rent that it would cost a private company to operate this plant?

The Chief.—I presume that if you are going to figure down the actual cost, you would take the actual cost of water.

The Chairman.—You are acquainted with the fact that great advancement has been made in the perfection of electrical apparatus and in the introduction of it, are you not?

The Chief.—There has been, undoubtedly.

The Chairman.—And that it is still susceptible of improvement and change, and that such improvements are constantly being made?

The Chief.—Certainly.

The Chairman.—Unless the city avails itself of those improvements, every plant purchased by it would deteriorate in efficiency, would it not?

The Chief.—It depends on whether the improvements are worth adopting; but if they are, the city certainly should adopt them.

With regard to the cost of maintenance, the committee find that Chief Walker, in his salary account, made no charge for the services of a Superintendent.

No provision for a machinist.

No charge for the removal of ashes.

No charge in the cost of maintenance for repairs to engines, boilers, dynamos, lamps, etc.

No charge for the use of a horse and wagon.

No provision for insurance.

No charge for water that would be consumed.

No provision for repairs to real estate.

As hereinabove mentioned, adding the interest and depreciation on the cost of the underground system used by the contracting company in supplying the 400 lights, the place of which would be taken by those proposed to be operated by the city, the cost to the city per lamp per night, under existing contract, is forty-three and sixteen-hundredths cents. The committee find that, exclusive of state taxes, the cost to the city per lamp per night, from its own plant, would be forty-two and thirty-two hundredths cents.

They submit that the difference of eighty-four hundredths of a cent per lamp per night in favor of the company contracting with the city, shows that the city purchases the current "plus a fair" (though small and reasonable) "commercial profit;" and shows that the city, properly charged in the capitalization of the plant and the cost of its maintenance, in accordance with what will be recognized by every fair and intelligent person in Philadelphia as just and proper business principles, cannot "manufacture the current for considerable less than the sum now paid."

For these reasons it may be safely concluded that it would not be wise or prudent policy for the city of Philadelphia to install an electric light plant of its own.

THE TRUTH ABOUT MUNICIPAL OWNERSHIP.

At the meeting of the American Economic Association, the Hon. Carroll D. Wright, Commissioner of Labor, in the discussion of Municipal Ownership, gave the true facts regarding the so-called investigations and reports of committees and mayors of various cities.

He said, "That whenever in an American city the question of Municipal or Private Ownership had come before the people the first practical step taken had been the appointment of a junketing committee of inquiry to investigate the methods and results of competing systems in other cities, and that such committees, beginning their studies in ignorance, had completed them in confusion of mind a thousand-fold worse than the original ignorance."

Mr. Greenough confirmed this statement, and explained that the success of the Massachusetts commission in obtaining exact and truthful balance sheets, is due to the immunity from unnecessary competition and from blackmailing raids which existing companies enjoy under the protection of the commission, in return for the publicity and regulation of charges which the commission forces upon them.

The writer has claimed this for more than ten years, and it is gratifying when such high authority endorses his views, regarding the unreliability of statements made by municipal authorities and investigating committees.

As stated, Massachusetts has a commission who control the Electric Companies, and all business must be reported to this board.

Therefore an analysis of municipal plants in Massachusetts can be made, based upon reports made to the Commissioners.

The figures used on previous pages of this book of municipal plants in Massachusetts are based upon these Commissioners' reports.

Therefore we can rely upon their being correct. The price paid per year per lamp to a private company by a municipality, is the entire cost to the taxpayers, and it is immaterial to them what it may cost the private corporation to produce the lights. Under these conditions there is no difficulty in arriving at a comparison of cost, if we can have the true cost to the municipality of producing the light when they attempt to operate the plant.

Taking plants in the same locality, and comparing only steam power, and in each case bringing the service down to actual cost per hour and candle power per hour for one cent, places all upon the same basis.

Municipal Plants in Massachusetts.	Cost per year.	Cost per hour.	Candle power per hour for 1 cent.	Hours per night.	Nights per month.	Candle power of lamp.
Braintree.....	$133 34	.0587	204	7	27	1,200
Domers.....	73 06	.05	240	6	24	1,200
Middleboro.....	107 34	.049	244.	8	25	1,200
Marblehead.....	100 30	.036	333	8	29	1,200
Peabody	90 76	.0266	451	10	30	1,200
Reading	138 86	.0951	126	6	23	1,200
Wakefield	124 30	.0851	141	5	23	1,200
Average.....	$110 99	.04	248	7	25	1,200
Private Corporations in Massachusetts.						
Hyde Park	$66 66	.042	476	5	26	2,000
Chelsea.....	109 50	.0286	419	11	29	1,200
Boston.....	127 75	.0354	536	10	30	2,000
Springfield.....	75 00	.0208	576	10	30	1,200
Westfield.....	82 00	.0379	527	6	30	2,000
Haverhill.....	132 24	.038	526	10	30	2,000
Worcester.....	127 75	.0354	536	10	30	2,000
Average.....	$102 98	.034	513	8	29	1,771

By reference to above table, it will be seen that average cost per year in the municipal plants is $110.99, while the same cost with private companies is $102.98.

The average cost per hour in municipal plants is .04, and the cost in private companies is only .034 cents.

The average candle power per hour furnished for one cent by the municipal plant is 248, while private company furnishes 513 candle power.

The number of hours per night run by municipal plant is 7, and with private company it is 8.

Number of nights burned in municipal plants is 25, while private companies burn 29.

Average candle power of municipal lamps is 1,200, while average furnished by the private companies is 1,771.

This shows the working of municipal plants and private corporations in Massachusetts, where both systems are compelled to report to the State Commissioners and the statements can be relied upon as being correct.

In the case of interest only 4 per cent is figured, although some of the municipal plants are paying a higher rate, and only 8 per cent depreciation is calculated; also one of the municipal plants, Middleboro, use water power part of the time.

In connection with the reports of Massachusetts companies is a report from a committee of the City Council of Springfield, as follows:

"While we have made a careful study of this very much agitated question, we do not feel competent, from our limited knowledge of the details of practical electric lighting, to submit a report sufficiently complete to even satisfy ourselves.

"We believe if the question is to be seriously contemplated in the future, it should be thoroughly investigated by those having sufficient knowledge of this question to demonstrate beyond a question of doubt that it will prove a safe investment, rather than follow the suggestions of theoretical economists, who argue that because the local company may make a profitable showing in this business, the city would also be able to do so. *We are unanimous in our opinion that it would not be advisable for the city at this time to operate a plant of its own.*

"While reports are scattered broadcast throughout the country, showing the advantage and saving to the city under municipal control, it is well to investigate these reports and ascertain whether they contain a true statement of the facts; whether or not the conditions are the same as exist here, and a comparison of the two would be fair. Also whether these reports show all that should be charged to this account, such as interest on money invested, depreciation on engines, boilers and electrical machinery, loss of taxes and many other items which must be considered in estimating the actual cost.

"*Could the city, unhampered by any limitations, establish a plant, we very much question whether the cost to the city would be as satisfactory as the present contract price.*"

MUNICIPAL PLANTS AND THEIR RECORDS.

Alleghany, Pa., arc plant, cost $250,994.41, using 715 arc 2,000 candle power, coal $1 per ton, all night every night.

Operating expenses of arc plant, $43,886.60; interest @, 4%, $10,039.77; depreciation @, 5%, $12,549.72; water tax, $500; taxes on two-thirds of cost of plant, $2,075; total, $69,051.09, being $96.57 per lamp per year, costing .0257 per hour and furnishing 739 candle power per hour for one cent. At the Street Lighting Convention in New Haven, the Superintendent of the Alleghany plant was present and made several statements regarding the plant and its operations, as appears by the following questions and answers:

The answers being those given by the Superintendent of the municipal plant.

Question.—How many tons of coal do you burn in your operation, annually?

Answer.—About 16 to 18 thousand tons.

Question.—And you pay $1 per ton for it?

Answer.—Yes.

Question.—Now, in contrasting the cost of your lights with cost of lighting in New Haven, for example, you would take into consideration any difference of price of supplies as a legitimate item I suppose?

Answer.—Yes, sir.

Question.—So that in order to make comparison you would multiply this 16 or 18 thousand tons by the difference in the price. I suppose the price of coal in New Haven is something like $3 or $4 a ton. That would probably make about $9 a lamp difference?

Answer.—Nine dollars a lamp difference.

Question.—Well, the cost of coal would be three times as great as in your city. The difference on these figures according to my reckoning is somewhere in the neighborhood of $16,000 or $18,000 more?

Answer.—Twelve thousand dollars.

Question.—Well, I simply wanted to draw attention to the fact that in taking the Alleghany figures as a basis of comparison—in the first place they must be increased by twice $16,000 or $18,000, that being the difference in the price of coal. And then you have got to add to it as I claim at a low calculation 5 per cent on the cost of the plant for depreciation, which would be from $15,000 to $20.000 a year more.

Now, when you get these two items alone added into the cost of Alleghany, I think it will not be difficult to find that there is no such wonderful difference between the cost under private and Municipal Ownership.

You said nothing about a sinking fund. Have you one?

Answer.—No, sir.

Question.—Anything included for the loss of taxes, which would be derived from a private lighting company if you had one?

Answer.—No, sir.

Question.—Don't you think this is an element in comparing the prices between private companies and Municipal Ownership?

Answer.—Well, I do not know just what that would be.

Question.—But you are doing in a certain sense what you would tax a private company for! In other words, you mean to say that you are spending the people's money with these experiments, claiming that the figures show to your advantage, without taking into consideration any of these items which a private company necessarily has to; I suppose you regard it as an experiment?

Answer.—That is one of the troubles with Municipal Ownership. It is true, the business is largely an experiment.

Question.—Don't you find as a matter of fact that the demand for the extension of light is without any reference to economic results?

Answer.—Undoubtedly. That is undoubtedly the case.

Question.—Have you ever heard of any business dropping depreciation down below 5 per cent. If you ever heard of any conservative business man allowing any less than 5 per cent depreciation?

Answer.—If the charges were made as they should be, plenty. It is too much. But there are too many that replace old machinery with new and charge it to improvements. That course has a tendency to to keep the percentage high. It is not an improvement. It is simply a repair, and should be charged to the cost of operations.

Question.—Are you the gentleman who made the report of the cost of operating the plant and deducted the insurance money received for

one of the buildings burned from the expenses of running the lights, and reported the balance left after this deduction as net cost of lights.

Answer.—I am. I will explain it to you. It was this way. Our station caught fire, and the loss was some $40,000, all of which the insurance company paid into the treasury of Alleghany city and the money was not available for my department.

Question.—Isn't it a fact if you hadn't deducted that it would have meant $40,000 more expense for running the lights.

Answer.—Why certainly it would. No question about that.

Note. The city spent $250,000 for buildings and machinery for producing the arc lights. A fire occurred by which these buildings were destroyed or damaged to the amount of $40,000, and instead of crediting this to construction account, thus showing that they had buildings worth $210,000 left, and $40,000 in cash received from the insurance companies to replace those burned, and in this way restoring their buildings to their original value or cost; they deducted it from the running expenses, and by this plan made it appear as though the running expenses were $40,000 less than they actually were, and of course, it appeared as though the cost of lights was very small.

The 2000 candle power arc lamps furnished by the municipality at Alleghany, cost $96.57, if only 5% is calculated for depreciation and nothing for accidents or other liabilities, and no provision for a sinking fund. While Pittsburg, on the other side of the river, contracts with a private company for 2000 candle power arc lights burned every night and all night for $96 per lamp per year, and the taxpayers assume no liability, and if lights do not burn per contract, draw a rebate.

ALAMEDA, Cal.—An examination of the city electrician's report shows that 100 lamps have been used, but that the average number of lamps burned for streets has been 88 upon a moonlight schedule.

Alameda taxpayers have expended as shown by the official records $155,223 74 for a municipal plant, and its maintenance for seven years.

The cost to a municipality of an enterprise is the amount which the taxpayers must furnish the city in taxes.

In this case they have furnished $155,223.74, and they have as an offset the electric plant which the most liberal estimates made do not exceed $40,000.

Deducting this amount from the amount expended and we have $115,223 as the cost of lights for seven years, being $164 per lamp per year.

This does not include anything for interest, deprecation or taxes.

Six per cent on $40,000, the amount claimed as present value is $16,800 for the same time the taxes as assessed would add $2.500 more. To this must be added the depreciation.

We find upon examining the city records apparatus that cost the taxpayers $20,000, was used seven years and then sold for $350, a net loss of $19,650.

In addition to this, they expended in repairs about $300 per month, making $25,200 for this item during the seven years.

The labor account was taken at $432.50 per month as reported, but the Treasurer's books show that $618 was paid for this item per month.

The above facts show conclusively that the taxpayers of Alameda have paid over $75,000 more for their lights than it would have cost had they contracted with a private company.

An advocate of Municipal Ownership referred to the municipal plant at Alameda as making money.

The Alameda Argus responds as follows:

That is the way our elephant is pictured at a distance. We do not know where Mr. Lemmon got his figures, but if he lived here and was interested in learning he would know that this city spent more than $42,000 on its light plant last year, $22,000 the year before, $27,000 the year before that, and is likely to spend more than $20,000 this year. The municipality could buy all the light it uses for $10,000 a year at the outside. The light it sells is undoubtedly sold at a loss. As a business venture Alameda's experiment is a rank and wretched failure. As a pet scheme of the Municipal Ownership faddist it will flourish as long as the people submit to the high taxes which it imposes.

The trouble with Municipal Ownership is not with the theory of eliminating private profit from public service, which is a good theory, but is due to the demonstrated impossibility of conducting public business on the same lines of economy and sound business principles that generally prevail under private ownership. Political pulls and patronage get in their deadly work and the best laid plans for the public good are defeated and made a burden instead of a blessing to the public. At any rate this has been the result of experience in many places, and the lessons of experience are the safest guides.

AUSTIN, Texas.—The water works and electric lights are all run under one head and accounts not separated, so there is no way of telling the cost of each department.

But the same general management that is found under all Municipal Ownership is disclosed.

An accident occurred which threw a large part of the city into darkness (and as they had no reserve, as is provided when private companies furnish the lights) for over three weeks. Also when thunder storms appeared it was found that the station apparatus was not properly protected, and the result, lights out and dynamos spoiled.

An experiment was tried of furnishing arc lamps for customers from the alternating circuit, and they were purchased and installed, but proved a failure and were abandoned.

The purchase of the waterworks and electric light plant with the useless experiments and loss by not properly installing the plant has created an indebtedness for the city of $1,652,000 at 6 per cent, and the Mayor says the hard times and high taxes upon the citizens has caused a delinquency in tax payments of $30,000, which they must try and collect.

He also says the electric plant has not been completed, and some arrangement must be made for a new switch board, new dynamos, wheels and shafts.

Here we have a short history of Municipal Ownership in Austin, and the taxpayers meeting the losses caused by improper construction, accidents and failures. All these things would have been avoided if contract had been made with a private company, but city must try managing a business enterprise, and with the usual result of loss to taxpayers.

ASHTABULA, Ohio.—Plant cost $80,773.98. 68 arc 2,000 candle power, run from dark until 3 a. m. Operating expenses, $12,267; interest @ 4 per cent, $3,230.95; depreciation @ 8 per cent. $6,461.90; taxes, $800; total, $22,759.85; less total income for incandescent light, $14,434; total, $8,325.85. Being $122.43 per year, costing .0408 per hour and furnishing 490 candle power per hour for one cent. The operating expense and the income are the same as given by the Superintendent of Plant.

ALEXANDRIA, Minn.—The Superintendent says waterworks and electric light accounts are kept as one and no way of telling the cost of each, but if one-half charged to each the 11 arc street lights cost the city $79.54 per year per lamp.

ABERDEEN, Miss.—Their plant cost $10,000. Lamps were burned 2920 hours per year at a cost of .0327 per hour, furnishing 611 candle power per hour for one cent.

ALEXANDRIA, Va.—Every night all night, and using steam power. Plant cost $16,000. Lights burned 3750 hours, costing .0231 per hour, furnishing 519 candle power per hour for one cent. They run every night all night and claim to employ only two men, an engineer and fireman. With only these two men these 92 lamps must carbon themselves, as the city say they do not employ any one to do it.

AURORA, Ill.—Plant cost $51,460.48. 206 arc 2,000 candle power. Burned 2,555 hours per year. Operating expenses, $10,301.56; interest @ 5 per cent, $2,573.02; depreciation @ 8 per cent, $4,116.83; taxes, $500; insurance, $250; total, $17,741.41. Being $86.12 per lamp, costing .0337 per hour and furnishing 593 candle power per hour for one cent.

The operating expenses for the first four years plant was run were on an average of $5,243.90 per year; the past six years they have averaged $9,385.43. The last year city clerk reports operating expenses as $10,301.56, showing a steady increase. After reporting operating expenses at $10,301.56 for the year, they send the stereotyped statement that lights cost $50 per year. They have burned out several armatures, but we find nothing in the lighting account to indicate that the expense was charged to that account.

ADRIAN, Minn.—Plant cost $13,013.10. 12 arc, 1200 candle power. Moonlight schedule until midnight. Operating expenses, $1,786.35; interest @ 6 per cent, $780; depreciation @ 8 per cent, $1,041; total, $3,607.35; less total income from lights, $1,621.14; total, $1,986.20. Being $165.51 per year per lamp, costing .0882 per hour and furnishing 136 candle power per hour for one cent.

ARLINGTON, Minn., has a plant that cost $3,938.43. They take their power from a mill and run 4 arc street lights. Their operating expenses amount to $1,152.50, add the interest, $236.28, and depreciation, $315, and we have $1,703.28, deducting their total income of $1,216.32, and we have $486.96 as the cost of 4 arc lights being $121.74 per lamp per year, burned until 11 o'clock p. m.

BRAINTREE, Mass.—Plant cost $57,828.78. 91 arc, 1200 candle power and 108, 25 candle power incandescents. Operating expenses, $9,829.24; interest @ 4 per cent, $2,313.15; depreciation @ 8 per cent, $4,626.04; taxes, $690; total, $17,458.43; less total income from commercial lights, $4,933.79; total, $12,524.64. Being $133.34 per year for 1200 candle power run only part of the night and costing .0587 per hour furnishing 204 candle power per hour for one cent. They also voted to purchase a new generator and give in payment notes payable $500 per year at 5 per cent. Advocates of Municipal Owuership tell you that the total cost of lights in Braintree, Mass., is $58, but the above report made to the Commissioners of Massachusetts shows the truth.

Note. Figures for Braintree on page 33 should read .0587 and 204.

BLOOMFIELD, Iowa, purchased an incandescent plant in 1891 for $14,000, in 1896 their dynamos failed and had to be replaced with new ones at a cost of $5,000, making an outlay of $19,000 for the taxpayers.

They report that they can duplicate the plant to day for one-half the amount they paid for old plant, thus showing a loss of $9,500, or plainly a depreciation of 50 per cent.

Here is a practical application of depreciation, still some of the theorists tell us there is no depreciation.

In addition to this loss by failure of machinery, they report that the business has been a losing venture.

BOWLING GREEN, Ky., plant cost $18,000. 72 arc 2,000 candle power, moonlight schedule. Operating expenses, $3,980.23; interest @ 6 per cent (which they pay), $1,080; depreciation @ 8 per cent, $1,440; taxes, $100; total, $6,600.23. Being $91.66 per year, costing .0418 per hour and furnishing 478 candle power per hour for one cent.

Upon an examination of the waterworks account we find that the Clerk's, Superintendent's and bookkeeper's salaries, postage, insurance and stationery, amounting to $1,683.15, and interest of $1,080 charged to the water department and interest fund, and not to the electric dement.

BROOKLINE, MASS., were using 21 lights furnished by a private company. The Selectmen wishing to secure the best results, employed ex-Mayor Matthews to make a thorough investigation of the two systems of street lighting, viz.: Municipal Ownership and contract plan with private company. His report is as follows:

To the Selectmen of the Town of Brookline—Gentlemen: I submit herewith my final report on the subject of a public electric light plant for the town of Brookline, together with estimates and opinions from Mr. William Jackson, city engineer of the city of Boston, and from Messrs. Stone & Webster, electrical experts.

That a fund or account should be created to cover depreciation, renewals, etc. (as distinguished from repairs) and that the payments to this fund should amount annually to 2 per cent of the cost of the buildings, 5 per cent of the cost of boilers, etc., and 10 per cent of the cost of engines, generators and other electrical apparatus, including all outside construction. These percentages will be found, when added together, to amount to from 7 to 7½ per cent of the first cost of the entire plant, or sufficient, if invested in a sinking fund, to equal, with the annual increment thereon, the first cost of the plant in about 10 years.

Messrs. Stone & Webster concur in these opinions so far as they have considered the questions involved.

Interest has been figured at the rate of 4 per cent on the total cost of the plant, and not, as it is commonly done in such calculations, on the amount of bonds outstanding if any, issued for the purpose of procuring the plant. The item of interest is allowed, not as representing the actual outlay for this purpose, but as representing the loss or cost to the town, by way of interest on the investment of maintaining a public plant as compared or contrasted with the annual expense of buying lights from a private company. That interest should in this manner be reckoned into the calculation is disputed by some advocates of Municipal Ownership; but it seems to me beyond question a necessary item to include in the account. The problem is practically the same as that which arises in the domestic economy of the individual citizen when calculating the relative advantage of hiring a house or buying one to live in. If in this calculation of the cost of living in a purchased house he should leave out interest on the cost of the house, the result would obviously be fallacious; for if he had not invested his money in the purchase of the house, he would have it to invest in interests or income-producing property. The item of interest must be taken into the account, not as an actual expenditure, but rather as a loss of income. So a town which establishes a public plant must, in making comparisons of this kind, take into account the annual value of the money thus invested; for if the plant was not bought, the purchase money might be put out at interest, and thus be a source of profit to the town, or left in the pockets of the taxpayers, and thus bring in an annual revenue to them as individuals.

Interest should be reckoned into the annual cost of maintaining a public lighting plant, at least for the purpose of a comparison with the

cost of buying lights from a private company; and the interest should be struck on the whole investment, not on the amount of bonds that may at any given time be outstanding.

In strictness, the value of the land on which the power plant is built should be included in the sum on which the interest is reckoned; but this item would be small in the case of Brookline, and I have not the data for its calculation.

TABLE OF ANNUAL COST.

Estimated by W. Jackson.

Capacity of plant.	Number of lights run.	Labor.	Fuel, materials, repairs, etc.	Insurance against fire and accidents.	Depreciation fund.	Interest account.	Total.	Total cost per lamp.
500	250	$10,236 00	$8,305 00	$1,200 00	$11,108 26	$6,609 48	$37,458 74	$149 83
500	375	12,836 00	11,857 50	1,285 00	12,855 39	7,308 36	46,142 25	123 04
750	500	15,280 00	15,710 00	1,650 00	17,796 30	10,006 52	60,442 82	120 88

Estimated by Stone & Webster.

375	250	10,236 00	9,308 75	606 60	6,782 26	3,567 34	30,500 95	122 00
500	375	12,836 00	13,364 95	792 22	9,365 39	4,869 88	41,228 44	109 94
750	500	15,280 00	17,717 50	1,044 12	12,639 52	6,639 69	53,320 83	106 65

The cost of operation in the above table is for lamps of 2000 candle power nominal, run all night throughout the year.

The above figures run from $106.65 for the largest plant to $149.83 for a plant of 500 lights run for 250 only. As the margin of 100 per cent in the capacity of the power station in the last mentioned case is more than would seem necessary, the selectmen can, I think, ignore the figure of $149.83 obtained on this basis; leaving the cost of operating arc lights on the overhead system at from $106.65 to $123.04 per lamp per annum, according to the number of lights and the expensiveness of the original plant.

That these prices, on the other hand, are higher than those frequently set up by theoretical advocates of Municipal Ownership is due, first, to the very general omission by the latter of adequate allowances (when any are made at all) for interest, depreciation, insurance and taxes; and, secondly, to the fact that many, in fact nearly all, of the official accounts published by municipal corporations of the operation of their electric light plants fail to include among the actual expenses of operation many items which should properly be charged thereto, such as general office or administrative expenses, rent, salaries, etc.

It would be beyond the scope of a report of this character to enter with any attempt at elaboration into the details of the various claims made on behalf of municipal lighting. I simply append a table, prepared by me with the same care and on substantially the same basis as the estimates for your board, of the actual cost of arc lights in some of the municipalities commonly cited as proof of the ability of the public to operate an electric light plant at figures far below those given by the experts employed in this investigation; and in the same table, in a parallel column, will be found the annual cost of these same plants as claimed with wide advertisement throughout the country by some of the professional advocates of Municipal Ownership:

TABLE SHOWING ALLEGED AND REAL ANNUAL COST PER LAMP OF CERTAIN MUNICIPALITIES.

Town or City.	Number of lights.	Candle power.	Alleged annual cost.	Real annual cost.
*†Bangor, Me	150	2,000	$48 00	$79 00
*†Lewiston, Me	100	2,000	55 00	65 50
Peabody, Mass	150	1,200	62 00	100 05
Bay City, Mich	181	2,000	58 00	76 25
†Goshen, Ind	31	2,000	77 00	111 54
†Bloomington, Ill	240	2,000	51 00	93 64
Chicago, Ill	1,100	2,000	96 00	181 83
Elgin, Ill	98	2,000	43 00	100 73
†Aurora, Ill	200	2,000	70 00	87 57
†Fairfield, Ia	16	2,000	70 00	117 16
*Ypsilanti, Mich	88	2,000	36 00	77 84

*These plants are run by water-power.

†These plants are operated in connection with other works.

Of the above municipalities only two—Bangor and Chicago—run their lights all-night throughout the year. The rest run on schedules—moonlight and other—amounting to from one-half to three-quarters of the standard all-night schedule time.

The real truth is, as might be expected, a mean between the claims of the rival parties to this controversy—that is, between the electric light companies and the extreme advocates of Municipal Ownership.

I believe that the estimates of annual cost given in the table of this report can be relied on by the selectmen and taxpayers of the town of Brookline as a reasonably close approximation to the actual cost in practice, provided the plant is operated with as little deviation from business principles as is politically possible.

BATAVIA, N. Y., plant cost $25,000, 91 arc 2,000 candle power, moonlight schedule. The following is a copy of the report made by the President of the village to the taxpayers, and it is on this basis that advocates of Municipal Ownership are proclaiming that cost of lights in Batavia are only about $52 per year: Coal, 677¾ tons, $1,301 39; oil, 147 gallons, $81.57; carbons, 42,732, $516.10; globes, $6; waste, $7.38; salaries of superintendent, linemen and trimmer, $1,980; repairs, tools, freight and extra labor, $496.06; insurance, $128.16; total, $4,516.66.

Here we have the statement that the figures given cover the entire expense of the lights.

They claimed to have burned 677 tons of coal, but no engineer or fireman paid for handling it or running the engine.

What is the actual cost to the taxpayers? Account per President's report, $4,516.66; add one half of salary of engineer and fireman, $750; interest @ 4 per cent, $1,000; depreciation @ 8 per cent, $2,000; taxes, $200; coal used in electric light plant, charged to waterworks, or not reported, $800; total, $9,266.66. Being $101.83 per year, costing .0468 per hour, and furnishing 430 candle power per hour for one cent. The private company offered to furnish the lights for .0266 per hour.

There are many things that do not appear in the President's report.

They have burned out a large number of armatures; nothing in the report shows such expense, and it must go to general expense of the village. A detailed report of the waterworks was made, and it was stated they used $1,081.06 worth of coal per year, and that in the electric light department they only used $1,301.39 for the year, but the village Treasurer's report for the same period shows that $3,214.16 was paid for coal. The amount charged to waterworks is about the same that it was before the electric plant was started. Therefore we must conclude that this difference was used in the electric plant, and we have added the $800 to the cost of lights.

The labor on the street lines, amounting to about $300, is charged to the street department, and the livery bill of $150 per year for the use of Superintendent, is charged to general expenses of the village. Also the bill for burned out armatures, amounting to about $600 per annum, does not appear in the lighting account, and charged to some

other account. There is another feature of the business peculiar to Batavia. The installation of the electric plant with the waterworks has caused the insurance rates to be raised all over the village.

Also the salary of the village clerk was increased because of more work. This item is not entered as a part of expense of lights.

The President says the average number of lamps burned was 91, but when he wants to show cost per lamp, he adds 12 arc lamps, which he says "is the drop in the line." This is certainly an original plan to increase the number of lamps, so as to make the cost per lamp less.

He also states that "depreciation is not figured in cost of operating. It is held that repairs are equal to the depreciation."

Then he reports the total amount expended for repairs, tools, extra labor, freight and express at $496.06 for the year. If we call $200 of this amount as repairs, which would leave an insignificant amount for the other items, and we have less than seven-eights per cent for depreciation and repairs, therefore, on the basis he figures, this plant must last 125 years. The Mayor of Decatur, Ill., says "that 10 per cent a year for depreciation, and 10 per cent for repairs is barely enough to meet the expense of those items."

BLUE ISLAND, Ill., every night until 1 o'clock, using steam power. The plant cost $20,000. They run lights 1,875 hours at a cost of .0451 per hour and furnished 443 candle power per hour for one cent. The city clerk states that they run the electric lights and waterworks together and only employed four men for both departments, running every night in the year. Who trims these 120 arc lamps every day? This would require the entire time of one man. The city clerk states that they lost three armatures. A careful examination of the accounts fails to reveal where this loss was charged.

BLOOMINGTON. Ill., moonlight schedule and using steam power. The plant cost $75,000. They run 2,247 hours at a cost of .0545 per hour, furnishing 366 candle power per hour for one cent.

BANGOR, Me., plant cost $37,000 172 arc, 1,200 candle power; water power Burned all night every night. Operating expenses, $6,000; interest @ 4 per cent, $1480; depreciation @ 8 per cent, $2,960; taxes, $300; insurance, $150; total, $10,890. Being $63.31 per year and costing 0168 per hour, and furnishing 714 candle power per hour for one cent, with water power, and using a 1,200 candle power lamp.

In the amount charged as cost of plant, it does not include any part of the building, wheelpit, wheel or gears and shafting, or for the water power or repairs on the water dam. Neither is there any charge made for fuel used when water fails, as it has several times, or for fireman and engineer at such times. If these expenses were added, it would amount to at least $10 per lamp more, making $73.31. Only one half the repairs are charged to the lighting account.

CHICAGO, Ill., plant cost $688,000. The statement has been made before nearly every committee of investigation by the advocates of "Municipal Ownership" that the lights in Chicago did not cost to exceed 19 cents per night. Now, after many cities have voted to adopt "Municipal Ownership," based upon the statement of the cost to Chicago, the superintendent of electricity makes a report to the city authorities that the actual operating expenses amount to $96.64 per lamp per year, and, with a very low rate for interest and depreciation, the cost is over 41 cents per night. In the hearing before the Select Council of Philadelphia the following analysis of the cost of lights furnished by the municipal plants at Chicago was made by a man who testified, and who has had years of practical experience in the business, and whose statements can be relied upon as being not only substantial, but conservative.

He said, "If you commence with the city electrician's figures, you find that he has raised the operating expenses to twenty-six and four-tenths cents. At an earlier period, as I have said, he said to me and others that the cost was nineteen cents; but explained that he had no method by which he arrived at that cost, such as is customary among electric light companies. In the figures now given, he has taken no account of interest or depreciation. The value of the plants is stated at six hundred and eighty-eight thousand three hundred and twelve dollars and eighty cents. I presume there has been what we call a depreciation of account. I know of the plants, and, in my judgment, that statement of their value is a very conservative one. I know something from description, of his underground service, and, I think, that if you could get at the appropriations made by the city of Chicago, you would probably find that eight hundred thousand dollars had been appropriated for it. He makes no mention of the difference between what he says the plants cost; and I think, that what has been appropriated would probably be charged to some other account; but so far as it is an illustration of the cost of lighting, it is not material.

"If you take his interest account on his capital, you will find that the cost of the lights is eight cents for that item. His insurance account is also omitted. If you take the insurance on half the valuation of his plant, at the current rates for insurance, you will add another cent. If you count in his superintendence, to which I have just alluded, at four thousand four hundred dollars, you add another cent and a fraction over. That makes thirty-seven cents and a small fraction for those items. The mooted points of depreciation are not incorporated in any of the items I mention. If you take the depreciation at 5 per cent, that will add another eight and four-tenths cents. The tax on capital stock, as levied in Pennsylvania, would add another eight-tenths cent; the tax on gross receipts, at forty cents per light, would add three-tenths cent; and the water rent would add two-tenths cent; making a total of forty-six and nine hundred and seventy-one thousandths cents, being $171.44 per year per lamp. That amount of cost is made up from the figures contained in the statement given by the city electrician. The additions I have made

are those which, in my judgment, and I think in the judgment of every fair-minded man, are perfectly proper additions."

The **Chicago Tribune** says: "*So far as things have gone on the city has paid two prices for its electric lights.* The work of extension has been far from satisfactory. The residents and property owners in the vicinity of the power house on Throop street, near Van Buren, are so dissatisfied at the manner of the extension that they threaten to bring suit against the city or to ask for an injunction restraining the city from operating the engines. When the latter are at work the houses are kept in a state of vibration. This arises from the foundations on which the boilers rest being set in concrete not far below the surface. Tenants are moving out of the blocks in the vicinity, as sleep is found impossible by many people.

"This is part of a scheme which is admitted to include electric plants and telephone establishments, and understood to be intended to pave the way for other Municipal Ownership and operation. The aim and intent are to make the city government a paternal one, providing light, heat, power, transportation, electric and telephonic communication, etc., thereby constituting a vast machine with powers far greater than ever wielded by Tammany, and giving opportunity for corruption on the biggest conceivable scale."

The **Chicago Evening Journal** says: "But where is the thing to end when once begun? What reason is there why the city should not go into the business of lighting streets, dwellings and public buildings, and also into the heating of these structures? Why should not the city furnish transportation over its territory as well as light? The reason why none of these things should be done by the city, is that they can be as well if not better done by individuals or by corporations.

"So long as municipal government cannot keep the streets in proper condition, it is not worth while for them to extend the field of their inefficient work."

In this connection it is proper to note the striking article by Prof. W. J. Meyers on the much vaunted municipal lighting of Chicago. "Without in anywise attempting to throw doubt on the ability or the integrity of the *personnel* of the Chicago municipal force, the author of the article has no trouble in showing that each arc lamp supplied by the city to itself costs no less than nearly $168—to be exact, $167.78 $\frac{944}{1110}$. We do not believe there is a city in the country that pays a private plant any such sum; if there be we hasten to congratulate the company holding the contract. An average price to-day for an all-night 2000 C. P. arc is 35 to 40 cents, which falls far short of the Chicago figure." Prof Meyers does not hesitate to say: "It is extremely doubtful that the city has saved any money by operating a plant of its own prior to 1893, and it seems very probable that the expense of operation in 1893, *considerably exceeded the amount paid for hired lamps.*" If this be true, and there is no evident flaw in the statistics or the deductions therefrom,

Chicago is not a case to be cited any longer by the advocates of municipal lighting plants, but to be sedulously avoided by them. Even if a far larger plant were to be run at full blast, Prof. Meyers cannot get his cost price below $128.86 per lamp per year; and there are few local companies that would not discount that.

The **Chicago Tribune** says: "According to expert testimony, backed with reliable statistics, Chicago's municipal electric light plants cost the people more a light than those of any city in the country."

The **New York Times** says: "The past week has brought revelations of the most barefaced frauds in the Waterworks Department of the city. A conservative estimate gives $500,000 as the sum of which Chicago has been robbed during the last two years. But in addition to direct stealing, there can be no doubt that through lax methods of administering the department the city loses more than $1,000,000 each year, and that is a low estimate. Only very unsophisticated citizens can be surprised at any degree of corruption, no matter how great its magnitude, for the rottenness of the department has long been notorious. The details of the present investigation make manifest the most unabashed fraud, and effrontery in the pursuance of criminal methods that indicates long familiarity, coupled with the utmost confidence of escaping punishment. The truth seems to be that each successive crop of thieves rested secure in the certainty of being followed in office by fellows of their own stripe, who would find their profit in imitating scoundrelism instead of exposing it. Under such circumstances no extreme caution was necessary, and events justified their sense of security for many years, until now, for the first time in a long period, a man possessed both of honesty and business ability has been placed at the head of the department, in the person of Commissioner McCann."

Mr. Yerkes, one of the largest taxpayers and one of its most influential citizens, says: "I deem municipal control of street car lines undesirable. It is not for the best interests of the people, and the operation of street car lines by public officials would be impracticable in this country. It is not a matter which admits of discussion. To contend any industry can be operated as well or as economically by public officials as by private corporations is ridiculous. The very fact the officials are continually changing would defeat any such plan. I know of no other business where education is so necessary as in that of street railroads. Few even of those people who have been connected with them for years, are thoroughly conversant with the requirements of their successful management. It is a business full of detail from the top to the bottom, and requires a lifetime of study and attention to fully understand. How, then, could it be expected a public official appointed, say, every two years, would be able to direct the operation of a system? It would take him that long to fully comprehend the duties of the employes.

"As for a proper understanding of the necessities, the economies, and the management of the roads, it can only be had by experience and a natural aptitude for the business.

"The great railway systems are successes only because they are intelligently managed. The net earnings divided among the stockholders is but a small portion of the gross receipts, and a little bad management could easily eat up that and more.

"But the City of Chicago manages its own water works and electric light system," was suggested.

"Yes," said Mr. Yerkes, "and we all know there are no large industries in this city so poorly or extravagantly managed as those under the control of the city government. The cost of supplying the people with water is much greater than it would be if done by a private corporation, and while we have no data in this city with which to compare the work of the Water Department, yet when placed beside the cost to corporations supplying towns with water we see how much more economical the corporation management is. There is no doubt there is enough money wasted to make a good dividend for a private corporation."

"But the electric light system?"

"In our electric light department," Mr. Yerkes grimly replied, "the most absurd condition is shown. This is one place where we can make a comparison between the municipal and private operation of an article used by the public. The plant of the city electrical department cost much more than it could have been built for by private corporations. In fact, the prices paid were most extravagant.

"The operation of the electric plant is to-day a disgrace to this community. There is not another large city in the country, and I doubt if there is one in the world, where it costs so much for public lighting as in Chicago, and I know of no city where the prices are as low as those of our private corporations. Counting the interest on the plant and the cost of operating, the total cost to the city is the stupendous sum of $165 a lamp a year. There is but one thing in excuse of this extravagance, and that is the wires in the heart of the city are underground. But allowing for this, when we compare this cost with the price charged by private corporations in other cities the result is startling."

Here Mr. Yerkes took up the political aspect of the question and continued: "If it is not economical or practicable to operate these industries by the municipality there can be only one reason why it should be done, and that is to support an army of politicians and their supporters, who, we all know, care little for work and who are of no service to the industry they may pretend to be engaged in. Suppose the street railway systems of Chicago were turned over to the city, who would operate them? Perhaps the Commissioner of Public Works or his Superintendent of Street Railways, a person who must have a political pull to be appointed to the position. He would, in all probability, be a man who knew but little if anything about the business.

"Then who would be his employes? The conductors, gripmen and motormen would be the people who were valuable in the different wards in time of election. These thousands of conductors, who are really the cashiers for the railways, would be men who owed their position to the

head of the department or the alderman of their ward. The situation, while serious to contemplate, would be laughable.

"Then what a power it would give the political party in control! The North and West Side street car systems, together with the elevated and branch lines, employ 6,000 men. The other lines perhaps 4,000 more, making a total of 10,000 in the city. At election time every man would know a change of administration meant his probable discharge. Then, again, if it were necessrry for the administration to have more votes, at least 50 per cent more people could be placed in positions as extra men, and for other purposes.

"In Europe, where there is a monarchial system of government, the plan of municipal control of corporations might succeed. The head of the department would be appointed by the ruler and be held strictly responsible for his acts. The best talent of the kingdom would, in all probability, be employed. In Europe, except in England, most of the railroads, both steam and street, are run under government supervision. But the conditions there and here are radically different. There it is necessary for the government to have constant control of the railroads. Hundreds of thousands of troops are constantly under arms. They are being constantly moved from post to post, always in readiness for what may happen. The street railways naturally come in for the same sort of treatment as the steam roads, but they are so insignificant in comparison they are not taken into consideration.

"I believe there would be no worse blow that could be struck our liberty than to place under municipal or governmental control the transportation and other corporations of this country. It would soon build up a government based upon the tyranny, strength, avarice and despotism of the head of that government, and the people themselves would have little or no voice in it."

The **Herald Times** of Chicago, says: "Those who advocate Municipal Ownership of street railways, gas plants and properties of that kind assume that municipal management will be honest and capable, and that the business will be carried on for the advantage of the public. They start out with the hypothesis that if these properties are intrusted to the municipality, by some peculiar dispensation of politics the boodlers will disappear and upright men take charge of all the large and vastly increased interests of the city. One argument we sometimes hear is that if the city owned these franchises there would be no temptation to boodlers to break into the City Council, as there would be nothing for them to make money out of and their occupation would be gone.

"Now, then, say the advocates of Municipal Ownership, let the city build and own its own street railways, its own gas plants, its own elevated roads, and the City Council will most surely manage them honestly. We would like to know why. Will the vastness of the property so stagger the Coughlins, the Powerses and the Hinky Dinks that their consciences will all of a sudden bloom into sensitiveness? Or will it only

give them a bigger quarry and an enlarged field for their peculiar enterprise?

"If there was Municipal Ownership in Chicago to-day, and the city owned every gas plant and every street railway within its borders, these men and their associate boodlers could dispose of them and defy the citizens, just as they have disposed of other property and franchises belonging to the city and laughed to scorn the protests of the people.

"Is this doubted? Look at Philadelphia. That city has owned its gas plant for twenty years, and now wants to sell or lease it. Could there not be brought about a similar emergency with us if we owned our plants, and would there not be corporations then as there are now, ready and willing to bribe aldermen to sell them?

"The thing for all good citizens to think of and concern themselves about is not how to enlarge Municipal Ownership, but how to limit it. Not how to increase the city's holdings, but how to hedge about with restrictions the sale or gift of that which it possesses."

New World of Chicago, says: "There is a great deal of force in the argument which some of the daily papers have advanced against the Municipal Ownership of street railroads, gas plants, etc., in this country. *It is argued that if the City Councils in this and other cities are so thoroughly corrupt that they cannot be trusted to deal honestly with private corporations in regard to these matters, it is hardly to be expected that they would deal honestly with the public, if they had the management of such enterprises in their own hands.* This really goes to the root of the whole matter. So long as the voters of this city see fit to elect over and over again aldermen whom they know to be absolutely corrupt and for sale to the highest bidder, it is hard to see how Municipal Ownership, or any other kind of ownership, can prevent these men from doing that which they notoriously go to the Council for the purpose of doing."

Tribune, Chicago, says: "Mr. Sullivan argues that Municipal Administration in American cities is so extravagant and unbusiness like that the powers and duties of the municipalities should be reduced rather than increased. It is difficult to answer this objection, which is the strongest that can be advanced. Imagine the street railways of Chicago in the hands of Bobby Burke or Billy Lorimer!"

CRAWFORDSVILLE, Ind., plant cost $63,000, 144 arc 2,000 candle power, moonlight schedule. Use natural gas for fuel costing only $2,400 for year's supply. Operating expense, $9,220; interest @ 6 per cent, $3,780; depreciation @ 8 per cent, $5,040; taxes, $600; total, $18,640; total income from commercial lights, $7,000, total, $11,640, being $80.83 per lamp per year, costing .0369 per hour and furnishing 542 candle power per hour for one cent.

A committee from Connorsville went there to examine the plant and were told that the total cost of the arc lights was $46.09 per year. An-

other committee from Springfield, Ill., were told that total cost of lights was $25.50 per year. The superintendent reported to an advocate of Municipal Ownership for publication that the income that city received from 2,600 incandescent lights was $7,000 per year. This would be about $2.69 per light per year, about one-half what it cost to run them, and in this report it is stated that lamps are 16, 25, 32 and 50 candle power. Consider the loss caused by running a 50 candle power lamp for $2.69 per year. Crawfordsville is a city of about 8,000 population, who are taxed to make up the loss caused by running lights in this way.

No wonder the Argus News of Crawfordsville said, "What our electric lights cost is something past finding out, at least so far no one has been able to find out. The Argus News for a long time took it for granted that everything was all right, but a little investigation goes to show that everything is all wrong."

A citizen of Crawfordsville writes: "So far as the cost of plant and street lights is concerned the venture is certainly a fearful failure. The plant can be duplicated today with new apparatus for $30,000 less than it cost the taxpayers." Besides they were only paying $71.42 to a private company for the lights before they installed the city plant.

CHARITON, Iowa, uses incandescent lights only for streets, and after deducting their total income from commercial lights, their incandescent street lights cost them $20 per year for each lamp.

COUNCIL GROVE, Kan., every night until midnight, using steam power. The plant cost $7,000. They burned the lights 1875 hours, at a cost of .0779 per hour, furnishing 154 candle power per hour for one cent.

COLDWATER, Mich., plant cost $37,449.78, 79 arc 2,000 candle power, moonlight schedule. Operating expenses, $6,600.83; interest @ 4 per cent, $1,497.96; depreciation @ 8 per cent, $2,995.92; taxes, $300; income from commercial lights, $5,306.37; total, $6,088.34, being $77.06 per year, costing .035 per hour and furnishing 571 candle power per hour for one cent.

There is one statement in the commissioners' report which shows that the claim made by private companies is correct, viz:

"The item of salaries, though apparently larger than last year, is really less from the fact that $550 paid for wages was charged to construction and $369.33 paid stoker was charged to fuel account." The report also shows that there has been a large falling off in income of commercial arc lights, for in 1894 it was $2,194, while in 1897 it is only $808, and this too, notwithstanding they reduced the price of commercial arc lights to $3 per month, showing that city was compelled in order to secure business to adopt the plan of reducing price to hold customers.

Here is a very suggestive query for those taxpayers who do not take the commercial arc why they should be taxed to make up the loss on the

arc lights furnished their neighbors, for it is well known that the cost of producing an arc light is more than the price they charge private customers.

CHAMBERSBURG, Pa., plant cost $50,000, 84 arc 2,000 candle power, all night every night. Operating expenses, $8,715.32; interest @ 4 per cent, $2,000; depreciation @ 8 per cent, $4,000; taxes, $300; total, $15,015.32; less income from commercial and incandescent lights, $6,245.36; total, $8,769.96, being $104.40 per year, costing .0278 per hour and furnishing 719 candle power per hour for one cent.

DETROIT, Mich., plant cost $729,371.74. 1564 arc 2000 candle power, burning every night all night. Operating expenses as given in the city electrician's report, $100,393.15; interest at 4 per cent as computed by the city electrician, $28,293.75; depreciation at 4 per cent (about half what it should be) on $422,958, and nothing on conduits, cables, buildings, real estate or track, $16,918.32; taxes on $427,500, value as computed by the city, $7,981.43; insurance on real estate buildings, arc and steam plant and machine shop only, $3,074.19; total, $156,960.84. Being $100.35 per lamp per year, costing .0264 per hour and furnishing 757 candle power per hour for one cent.

The above figures are the same as made by the city electrician with the exception of depreciation which he only figures 4 per cent on the boilers and nothing on the rest of the plant. Experience has shown that there is 10 per cent depreciation on electrical apparatus but in the above calculation it is only called 4 per cent.

All conservative business men provide for insurance to protect their property; why should not the taxpayers be protected in the same way? The cost to Detroit running their own plant is $100.35, while Cincinnati only pays a private company $84.90 for the same service, and Cleveland $94.80, Newark, N. J., $98.55, Pittsburg, Pa., $96.00.

It is evident that the city has a first-class man as electrician and he has given a very clear and clean report of the business, but he could not make two dollars out of one and his report confirms the statements previously made that municipalities cannot produce the lights at such price as has been reported by the advocates of Municipal Ownership. Here we have the record of a plant claimed to be the best in the United States with every improvement that money could purchase and well managed, still the cost of their lights is more than charged by a large number of private companies.

The report of Detroit develops the fact that has been claimed by private companies, viz.: That municipalities do not get the same return from labor employed. They employ one head trimmer and twenty-seven assistants to carbon 1564 lamps; this would only be fifty-nine lamps for each man not including the foreman or head trimmer; in addition two patrolmen are employed. There are plenty of men employed by private companies that are trimming 110 lamps every day and patrol them besides. Another point you will find in nearly every statement favoring

Municipal Ownership; they figure coal at about 2½ lbs. per kilowatt hour, while in Detroit, with the very best equipment to be obtained, it is 4.99 lbs. per kilowatt hour.

President Hudson of the Detroit Public Lighting Commission, after two years experience of Municipal Ownership says: "I have never claimed that we could light Detroit as cheaply as many experts have said. My figure for an arc light has always been $100.00."

Alexander Dow, city electrician, who installed and operated the Detroit plant, says he declined a reappointment and published in the Detroit Free Press his opinion against Municipal Ownership

"I have had my opinion all through my service here, and my experience of municipal methods and limitations, even under the peculiar good conditions of Detroit, has only fixed those opinions more firmly in my mind.

"It would have been preferable for this city to accept such terms as are frequently offered these days for similar lots of lighting under contract; and I believe that a bid in good faith of $96 to $100 per light per annum for good service would block the establishment of a municipal plant."

The Journal, Ithaca, N. Y., says: "The reports of the month include that of the Detroit Public Lighting Commission upon the results of the attempt on the part of that city to conduct the business of street lighting on its own account. This was one of the first of such projects undertaken by that city during the 'Pingree era.' It was expected that enormous savings would accrue, and that the city would get its light at a fraction of the amount till then paid to private companies.

"This, the second report gives as the annual cost $64.19 per lamp, per annum, for all-night lighting, as the cash outlay; while to this is to be added, of course, loss of the taxes formerly paid by the private corporation and a moderate amount to cover depreciation and maintenance of plant. They figure the total at $89.40 per lamp. It is, however, remarked by The Electrical Engineer, that the only item subject to this allowance is the outfit of boilers, and that it is assumed that 'all the buildings, steam engines, tools, machinery, conduits, towers and lamp-posts, lines and cables will be just as good twenty-five years from today as they are at the present moment.' The statement is obviously absurd. It is considered fair to assume not less, certainly, than 5 per cent annually for depreciation of the 'plant' as a whole. The total cost of the establishment, in working order, is given by the commission as $617,594. The actual operating cost to the city is thus brought up to show $100 per lamp. The city has been compelled to pay $337.88 per arc and $18.93 per incandescent lamp for installation."

DUNKIRK, N. Y., plant cost $21,011.75, 75 arc 2,000 candle power. Burned 3,000 hours per year. A copy of the report as made to the taxpayers in 1897 is given verbatim: Fuel, $1,206.18; oil, $51.56; carbons, $348.54; waste, $10.71; globes, $52.32; carbon holders, $7.70; brushes, $11.10; segments, $18.60; repairing commutator, $12.70; repairing engines, $19.05; repairing shafting, 80 cents; repairing boiler, 83 cents; re-

pairing lamps, $90.45; repairing lines, $13.58; wire, $1.46; miscellaneous supplies, $38.24; incandescent lamps, 98 cents; incandescent armature, $17.38; arc armature, $151.14; salary of trimmer, $660; extra pay to firemen, $120; labor on lines, $133.62; expert service in matter of electric light extension, $400; total, $3,367.44.

This is a copy of the official report to the taxpayers and it is claimed that it covers the entire expense of the lights and that the cost is only $39.54 per lamp per year.

These are the figures that are being used by the advocates of Municipal Ownership in their comparison of cost with price charged by private companies, and are sent to other cities as a sample of what can be saved by Municipal Ownership. They run all night every night and the only wages charged, aside from the trimmer, is $120 for the entire labor account to run 75 arc lights 3,000 hours per year.

The secret of this is disclosed when an examination is made of the expenses of water department. There we find $2,880 charged for engineers and firemen, also $1,200 for superintendent, $250 for clerk, $48 for printing, $337.36 for repairs to power house building where dynamos stand, $10,491.50 interest paid on bonds, $80 paid for legal services over the electric light business, $54.08 for office supplies.

It is by such methods that the cost of lights is made so small, but does it help the taxpayer, and is it a fair or just comparison between the municipal plant and a private company?

The following statement gives a fair account of the actual cost to the taxpayer: Operating expenses as given by the lighting committee, $3,367.44; interest @ 4 per cent, $840.44; depreciation @ 8 per cent, $1,680.88; taxes, $150; insurance, $50; one-half of engineer's, fireman's, superintendent and clerk's wages, $2,165; legal expenses for electric light, $80; total, $8,333.76, being $111.11 per lamp per year, costing .037 per hour and furnishing 540 candle power per hour for one cent.

In this calculation no estimate is made of cost of building or boilers and no deduction for the 2,250 hours that lights were out, and the amounts are used as they are found in the commission's report to the taxpayers, only that one-half of wages, etc., are carried to the electric department. We leave it for any fair-minded man to decide if in order to ascertain the actual cost, the expenses of those things caused by running the lights should not be charged to that department.

DANVILLE, Va., plant cost $16,900. Building and water power leased of private company, for which they pay $15.10 per year per horse power, 85 arc 1,200 candle power. Operating expenses, $4,747.42; interest @ 4 per cent, $676; depreciation @ 8 per cent, $1,352; taxes, $125; total, $6,900.42; income from electric plant, $1,015.15; total, $5,885.27, being $69.23 per year, costing .0184 per hour and furnishing 652 candle power per hour for one cent, using water power.

The superintendent in his report makes the cost $100 per lamp per year. In this calculation $9,000, which the city lost by fire, destroying their apparatus, and no insurance, is not included. Of course if this loss

was added, the cost of lamps would be very heavy. If they had contracted with a private company, this $9,000 loss would not have fallen upon the taxpayers.

The superintendent's salary is charged to the general expense account and not in the electric account.

DANVERS, Mass., plant cost $26,000, 81 arc 1,200 candle power. Burned until midnight, moonlight schedule. Operating expenses, $3,508.21; interest @ 4 per cent, $1,040; depreciation @ 8 per cent on $15,000, $1,200; taxes on $10,000, $170; total, $5,918.21. Costing $73.06 per year for 1,200 candle power light burned 1,460 hours, being .05 per hour and furnishing 240 candle power per hour for one cent.

DECATUR, Ill.—A place of about 17,000 inhabitants. They agitated the subject of Municipal Ownership and were at once visited by a score of agents and electrical engineers with the stereotyped list of cities who owned plants and where lights only cost $50 per year. They adopted the plan and invested $50,000 as a starter. The city clerk reports the operating expenses at $6,600 per year; interest at 5 per cent, $2,500; depreciation at 10 per cent, $5,000, making $14,100, the cost of running 105 arc lamps on a moolight scedule being $134.28 per lamp per year, with coal at $1.50 per ton. Those advocating Municipal Ownership claim that there is little if any depreciation. Therefor, to secure the opinion of the Mayor of Decatur upon this point, after they had practically demonstrated it, a letter was addressed to him asking for same. He said in reply, "that if an allowance of 10 per cent was made on the cost of the plant to keep it in repair and another 10 per cent on account of depreciation the charge would not be too heavy." In the statement showing the cost of lights at $134.28, only 10 per cent was figured on this item which the Mayor says 20 per cent is none too large. Here we have the actual experience of a city. If you examine the cost of lights in list of cities furnished by advocates of Municipal Ownership, you will find that the total cost of lights in Decatur, Ill., given at $50 per lamp per year.

ELGIN, Ill., moonlight schedule and using steam power, the plant costing $24,000. They run lights 2,190 hours, costing .0586 per hour, furnishing 341 candle power per hour for one cent. They have been compelled to refit their plant with new apparatus after a little over six years' use, proving that in this case 10 per cent depreciation was too low.

EMONS, Pa., moonlight schedule, with steam power, the plant costing $26,900. They burned 2,190 hours, costing, after deducting all income received from rented lights, .0511 per hour and furnished 391 candle power per hour for one cent.

FREDONIA, N. Y., moonlight schedule until midnight. Steam power. Plant costing $13,000. Lamps were burned 1,460 hours at a cost of .0524 per hour, and furnished 381 candle power for one cent.

FAIRFIELD, Iowa, moonlight schedule, using steam power, the plant costing $6,000. They burned the lights 2,190 hours, costing .07 per hour, furnishing 285 candle power per hour for one cent. Only one man's wages charged to electric light, all the rest charged to waterworks. No entry could be found of repairs, although they broke the machine and lights were out for two weeks.

FREDERICK, Md., moonlight schedule and using steam power, plant costing $15,000. They run 2,190 hours at a cost of .0435 per hour and furnished 459 candle power per hour for one cent. The running expenses increased $400 over the previous year.

GOSHEN, Ind., runs 38 arc lights part of each night. The water works and electric light are run from the same station. No separate accounts. There is no way of ascertaining the cost of lights. They do not know themselves only as they guess at cost.

They think cost is about $113.41 per year per lamp.

GRIFFIN, Ga., plant cost $30,000, 53 arc 2,000 candle power. Operating expenses, $5,580.72; interest @ 4 per cent, $1,200; depreciation @ 8 per cent, $2,400; taxes, $300; total, $9,480.72; income from incandescent lights, $5,495.28; total, $3,985.44, being $75.19 per year, costing .0343 per hour and furnishing 583 candle power per hour for one cent. The waterworks and electric plant are together and only one-half of the expenses and labor are charged to that department.

GALION, Ohio, moolight schedule, with steam power, the plant costing $26,900. They burned lights 2,190 hours, costing .0511 per hour and furnished 391 candle power per hour for one cent.

GALVESTON, Tex., moonlight schedule 28 nights per month, with steam power. The plant cost $65,000. They burned lights 2,190 hours, costing .456 per hour, furnishing 438 candle power per hour for one cent.

GRAND LEDGE, Mich., run 26 nights per month until 11 o'clock, using steam power. Plant cost $10,000. They burned the lights 1,460 hours at a cost, after deducting all incomes from commercial lights, of 11 cents per hour, furnishing 181 candle power per hour for one cent.

HULL, Mass., as reported to state commissioners. Plant cost $89.-754.24. Burn on an average 255 25-candle power incandescent lights until midnight, moonlight schedule. Operating expenses, $11,851.91; interest @ 4 per cent, $3,590.16; depreciation at 8 per cent, $7,180.32; taxes, $598.36; total, $23,220.75; less income on all commercial lights, $7,960.11; total, $15,260.64, being $59.84 per year for a 25 candle power incandescent lamp run only until midnight. Price of arc lights is $16.50 per month.

The town voted authorizing the selectmen to borrow $2,400 to pay for repairs caused by an accident during the year. During the year the street lights were out for six weeks.

HANNIBAL, Mo., plant cost $51,534,37. After deducting all income from commercial lights the cost is .0540 per hour, furnishing 370 candle power per hour for one cent.

Part of the expenses of the electric lights are charged to the general funds, while in many cases repairs are charged to construction.

HOLLAND, Mich., plant cost $33,478.02, 49 arc 2,000 candle power, moonlight schedule. Operating expenses, $9,094.30; interest @ 4 per cent, $1,339.12; depreciation @ 8 per cent, $2,678.24; taxes, $300; insurance, $200; total, $13,611.66; less income from commercial lights, $7,-251.72; total, $6,359.94, being $129.79 per year and costing .0592 per hour and furnishing 337 candle power per hour for one cent.

HAMILTON, Ohio, had a Mayor who was an advocate of Municipal Ownership, and in his report he said, "he had made an investigation and in some cases the figures show that the city could get its lights for nothing, making enough out of the profits on general electric lighting business to provide all the arc lights required free of expense." This Mayor's statement is the visionary and theoretical part of the plan. What does the practical part or real experience show after the plant has been established?

The city owns waterworks started in 1884 and cost $315,000. In 1889 they started a gas plant costing $160,000 and electric light plant costing $100,000 was started in 1895. This amount of $575,000 was raised by selling city bonds. The city clerk says:

"The threat to shut down the electric light plant is because they are out of funds. Hamilton of all the cities in the United States has been most afflicted with the Municipal Ownership craze, and now having its fill on theory, is reaping the results, and we must bear and grin as best we can under adverse circumstances.

"But on the condition that now confronts us we ought to try and inject a little common sense into the municipal cranium and try and evolve some scheme whereby we can kite along for the present and perhaps realize some of the fond expectations that were held out in the past.

"We are deluded in the belief that we have cheap water, gas and electric light. When we add to these luxuries the fact that we have so raised the rate of municipal taxation until it has become burdensome, and then compare with other cities of our size we find we are not as well off as we think we are.

"We are taxed to pay the interest on the waterworks bonds, as well as to provide for their redemption. We are taxed to pay the interest of the gas works and the electric light plant, as well as to provide for the redemption of bonds, and we are also taxed for the purpose of lighting the corporation, which is nothing more than double taxation. This is a curious situation, but is nevertheless true.

"While the water tax levy is up to the limit, it fails to pay the interest and bonds falling due, and the same may be said of the gas and electric light levy, and they also barely pay the interest charges with no

bonds yet falling due. When they do commence to fall due, how they are going to be paid is a serious question.

"We should realize that the annual interest charge for water, gas works and electric light is $28,000, with $10,000 waterworks bonds falling due each year, making a total charge of $38,000, which must be paid annually, and no assistance is rendered by either of said plants in helping to pay said charges; it looks like the city is carrying a heavy burden. * * * * The city has reached the condition that comes to every individual who reaches out beyond his means.

"Maturity comes and protest has been avoided during the past year by using heroic remedies. Refunding bonds as they fall due may be, in the opinion of many, good financiering, but that does not pay the debt or discharge the interest which creeps along just the same as the bonds fall due and which must be paid.

Hamilton is being devoured whole by its interest charges. During the coming year the interest owing by the city will amount to the sum of $43,035; bonds falling due $48,000, or a total of $91,125, or nearly 90 per cent of the entire revenue of the city will be necessary for meeting these charges. We have had theory long enough and we must meet the condition. "

A correspondent writing from Hamilton says: "The question of closing down the electric light plant is provoking much talk. To be practically thrown into utter darkness again all on account of mismanagement is not relished by those who pay the high tax rate to keep things moving along. The issuing of $15,000 worth of bonds to operate the plant is more than the people can stand, especially when the light plant has already cost $50,000 more than it should have cost the taxpayers." Still the trustees announced that they would be compelled to shut down for want of funds.

The Mayor gave the theoretical part of the plan. Here we have the actual or real experience after the plant has been established. Still later developments also show how such things end.

The city not being able to meet its obligations, Judge Crane, an attorney, filed a petition for a receiver for the City of Hamilton, with the following pleading, and alleging ten grounds in support of the application, viz:

That the city is on the verge of bankruptcy.

That the city has refused to pay just debts which are a year overdue.

That the city has defaulted upon various bonded debts.

That the credit of the city grows worse each month.

That through the extravagance of those in authority, more money is expended than the resources of the city will permit.

That the city is more severely taxed than any other in Ohio.

That large amounts of the city funds are misappropriated by those in authority.

That the city authorities do not take care of the city's finances according to law.

That the several funds are now depleted; that the schools cannot be kept open more than a month; that the street funds are exhausted; that there is no money to keep the library open for more than two months; that the city is unable to light its parks or public places, or to remove garbage, or clean the streets and is otherwise in great danger of bankruptcy.

The city clerk claims they can pay all lawful obligations, and says: "If these plants could be so managed as to pay the interest charge alone from out of their earnings, we could cut the levy $3.50 on each $1,000.

"Of the $14.20 of taxes collected on each $1,000 for city purposes, $8.10 goes to pay interest and bonds, leaving but $6.10 for the other needs of the city. The city has never yet defaulted in the payment of any interest or the payment of its bonds.

"But the next ten years are going to be hard ones on the taxpayers by reason of direct assessments, but the city has assets for every liability."

This means that taxpayers have got to consent to assessments to meet the city's liabilities or lose their property, for every man's property in the city is mortgaged for these city debts.

E. B. Rogers being interviewed said: "I think it was right. There is not a department in the city that is not in the rut. I think that one or three men, under instruction of the court, should be appointed to take charge of affairs. Everything costs us double, it seems."

Judge Crane said the bill had been marked O. K. by the committee on claims, and that the city had refused to pay it. Whether or not we get a receiver, he said, we wish to call a halt to the bonded indebtedness and the reckless expenditures which are continually increasing.

The bonds of the city of Hamilton in total are $877,453, and only about 18,000 population. Here we have the direct results of a municipality going into a business enterprise. If the city had not adopted the plan of Municipal Ownership it would not stand in the position it does today.

In an article in the Independent, the writer asserted that the municipal plant had yielded enough to cover interest and depreciation, and the people were unanimously convinced of the wisdom of Municipal Ownership.

HERKIMER, N. Y., moonlight schedule until 1 A. M., using steam power. The plant cost $14,000. They burned lights 1,875 hours at a cost of .0572 per hour, furnishing 349 candle power per hour for one cent. No separate accounts are kept and they guess at the amount given as the running expenses of the lights.

HALLETSVILLE, Texas, every night until 12 midnight. The plant cost $5,000 They burned the lights 1,875 hours at a cost of .0452 per hour. They run waterworks and electric lights together, and claim that they have only one man to manage the entire business, and in above cost only one-half the expense is included.

HERRINGTON, Kansas, every night until midnight, using steam power. Plant cost $28,000. They run lights 1,825 hours, costing, after deducting all income received from commercial lights, .1468 per hour and furnished only 136 candle power per hour for one cent. The advocates of Municipal Ownership claim that where cities furnish commercial lights the profits from that branch will pay all expenses of the street lights, and here we have a practical application of their theory, and the result demonstrates the fallacy of basing profits upon theories and political talk. The Mayor says, "what we have to contend with is the debts accrued at the time of the boom. This was when the electric plant was installed."

HIGH POINT, N. C., run 22 nights per month. Power is furnished by a lumber mill company at $100 per month. The plant cost $5,600. They burned lights 1,250 hours at a cost of .0449 per hour, furnishing 267 candle power per hour for one cent.

HUNTINGTON, Ind., steam power; plant cost $15,000. They burned 2,190 hours at a cost of .0491 per hour, furnishing 408 candle power per hour for one cent. The superintendent's salary being charged to the fire department.

JACKSONVILLE, Florida.—The following statement of cost for the year was given by the superintendent to the taxpayers: "Operating expenses of plant, $23,691.91; extensions and repairs, $7,166.87; total, $30,858.78; receipts from commercial lighting, $27,802.71, leaving a deficit of $3,056.07, interest on $75,000 bonds, at 5 per cent, $3,750; cost of public lighting, $6,806 07." The plant cost $98,000. Why then is interest figured on only $75,000? From the above statement the taxpayers are made to believe that the total cost of their lights for the year is $6,806.07. What are the facts? Deficit as given by superintendent, $3,056.07; interest on $98,000, cost of plant, @ 5 per cent, $4,900; depreciation @ 8 per cent, $7,640; taxes, $980; total, $16,576.07; to this must be added judgment against the city for an accident, $1,500; net cost, $18,076.07.

The superintendent says in his report that, "the present lighting capacity that is used on the streets and in public buildings is 261,500 candle power." This is equivalent to 130 2,000-candle power arc lamps, making the cost per lamp per year, $139.04, costing .037 per hour and furnishing 540 candle power per hour for one cent. In the income, credit is taken for $1,587.50 uncollected bills for lights and they were referred to the city attorney to see if anything could be realized from them. If these are deducted from income it increases the cost of the lights that much. You will find in all the reports circulated by the advocates of Municipal Ownership a statement that the total cost of Jacksonville's street lights is only $50 per year.

An action was brought against the city for damages, and the United States Court awarded $1,500 to the plaintiff. The complainant was sent

late one night to deposit letters in a United States letter box. As he came to the place where the box had been for a long time located, he stepped and fell into an excavation which the city employes had dug for the purpose of setting an electric light pole, and which had been permitted to remain open.

The claim was also made that the city electric lights in the vicinity were not burning as usual that night and that no notice had been posted, warning pedestrians of danger.

This is one of the dangers and responsibilities that a city assumes, when they attempt Municipal Ownership. If a private company had been furnishing the lights they would not only have had to pay the individual damages, but rebated to the city on account of lights not burning.

JACKSON, Ohio, plant cost $20,000. Operating expenses, $5,389.52; interest @ 4 per cent, $800; depreciation @ 8 per cent, $1,600; taxes, $200; insurance, $100; total, $8,089.52; less income from incandescent and commercial lights, $3,984.76; total, $4,104.76, being $102.61 per year.

Here we have an illustration of the effect of furnishing certain citizens of a city private lights at less than cost, and at the expense of the other taxpayers. One citizen stated that he had 128 incandescent lights and that they only cost him $6.22 a month. Another said he was using 18 incandescent lights and that they cost him less than five cents per light per month.

Making up the losses caused by running lights at such prices, is what makes the bill for street lights so large.

What do the taxpayers who do not use electric lights think of the plan of furnishing an incandescent light at five cents a month and then taxing them to make up the loss caused by such business.

An advocate of Municipal Ownership published a statement and sent it broadcast, in which the income of the plant was given as $7,000, and expenses $4,000, while the annual report to the mayor and aldermen says expenditures, not including interest depreciation, taxes or insurance $5,389.52, and receipts from commercial and incandescent lights $3,984.76, less than half the income claimed by this advocate of Municipal Ownership.

JAMESTOWN, N. Y., plant cost $80,000, 350 arc 1,200 candle power, all night every night. Operating expenses, $24,000; interest @ 4 per cent, $3,200; depreciation @ 8 per cent, $6,400; taxes, $800; total, $34,400; less income from incandescent lights, $3,500; total, $30,900, being $88.28 per year, costing .0235 per hour and furnishing 510 candle power per hour for one cent.

They spent about $500 in moving poles and the expense was charged to general fund. While interviewing citizens of Jamestown they stated that if the superintendent should make an honest statement of the expenses he would lose his position. Also others stated that they knew of

expenses incurred in running the plant which were not entered in the light account, and good judges stated that the original plant which cost $30,000 could not be sold for $10,000.

KEOKUK, Iowa, made a thorough investigation of the subject and were furnished with all the reports from municipalities, who claimed that it only cost them from $50 to $58 per year to produce an arc light. The Arena articles were secured and examined, electrical engineers consulted, and after all of this investigation, the city contracted with a private company for five years, at $75 per year, on the Philadelphia schedule. This shows that this examination disclosed the fact that the statements sent them from municipalities regarding the cost of lights, did not cover the actual cost to the taxpayers, and they wisely decided to light their city by a contract with a private company.

LITTLE ROCK, Ark.—The city clerk of Little Rock on January 2, 1893, stated on pages No. 17 and No. 18 of his report to the Mayor and City Oouncil, that the expenses of installing and maintaining the electric light plant to January 1, 1893, was $76,329.67.

About November 1, 1893, the Council appropriated $30,000 more for refitting and repairing the electric plant, making the total outlay at that time, $106,329. Add to this $36,740 for the operating expenses from January 1, 1893, to January 1, 1897, as shown by their reports, and we have an outlay of $143,069 on account of electric lights, not including any charge for interest, taxes or depreciation.

In the city clerk's report, January 1, 1896, on page No. 6, he gives the value and inventory of the electric plant at $35,000

Deduct this from the $143,069 outlay and we have $108,069 as the expense to the taxpayers of Little Rock in maintaining their electric lights for eight years, showing that each lamp has cost $103.11 per year on an average, and this too, without any allowance for interest, taxes, or depreciation, and the lamps burned on moonlight schedule, only giving 2,446 hours service per year, costing .047 per hour, furnishing 255 candle power per hour for one cent.

These statements are taken from and based upon their own reports to the Mayor and City Council, notwithstanding these facts as disclosed by the city records. Advocates of Municipal Ownership send out reports that the total cost for lights at Little Rock is $50 per lamp per year.

A committee from Connorsville went there and was told that lights cost $42 per year. Another committee from Mobile was told cost was $51. The Scranton committee was informed that cost was $47. Steubenville, Ohio, was notified that cost was $60 per year. Youngstown committee was given $69.83 as cost, while the city clerk reported to the Mayor that lights cost $80.83 per year. This illustrates the uselessness of the investigations made by committees.

LANSING, Mich.—An advocate of Municipal Ownership published the following statement regarding Lansing's municipal plant and used it as an argument why other places should adopt the plan.

He said they were using 116 2,000-candle power arc lamps in streets, and 60 2,000 candle power arc lamps in commercial service. Interest included in expenses. Income of plant per year, $27,000; expenses of plant per year, $15,000; profits per year, $12,000.

Here we have statements published for the purpose of inducing other cities to adopt the plan by giving them the impression that there was a profit over all expenses to the city of $12,000 per year. The Mayor of Lansing shows the true condition of Municipal Ownership in that city and says:

"The plant has now cost $106,000 and is far from being worth any such amount and in thus doing business the city is really engaged in wholesale larcency," and sums up as follows: "If the question was now for the first time presented to the city whether they should embark in the business of furnishing commercial lights, I should most assuredly say that it should not. But we are confronted with a condition; we own the plant, poles and wire, we must maintain the business as we cannot sell it for anything like its cost. It seems advisable therefore to continue to sell lights if we can do so without loss. We ought to go out of the business and charge the loss up to the Experiment fund. Reconstruction of the system has begun and evidently it must continue at considerable cost."

The plant, as the Mayor says, has cost $106,000. The operating expenses for three and one-half years has averaged per year $16,284.48; interest @ 5 per cent, $5,300; depreciation @ 8 per cent, $8,480; taxes, $1,000; total, $31,064.48; less income from commercial lights, $14,709.12; total, $16,355.36, being $140 94 per lamp per year. They purchased the plant of the private company for $45,000. Then spent $51,877.13 in moving plant to waterworks and making changes and improvements, and good judges claim that notwithstanding the money squandered in moving the plant, it is worth no more now than when purchased. Their lights were very unsatisfactory, and there was so much complaint that they hired an expert to advise them what to do. He advised them that if they would expend $5,000 more in changes it would do the business for a while. They paid him about $400 for his services.

The Council paid the interest @ 5 per cent on $60,000 of bonds, but this does not show in their report of electric light expenses.

They have charged private customers 25 per cent more than private companies, the lowest meter rates being 12 cents per kilowatt, while private companies in the same section are charging only 8 cents. Here are the true facts regarding savings. No wonder the Mayor says it is "wholesale larceny." Not satisfied with the past the Council is preparing an ordinance, taxing all electric companies 5 per cent on gross earnings and prohibiting the erection of any poles for lighting purposes. Here is municipal monopoly. Not only charging exhorbitant rates for lights, they intend to control the business, so that there can be no competition with the municipal plant.

LEWISTON, Me., plant cost $25,000, 97 arc 2,000 candle power, water power, all night. Operating expenses, $4,674.35; interest @ 4 per cent, $1,000; depreciation @ 8 per cent, $2,000; 100 horse power water power at $7 per annum, same as the mills pay, $700; taxes, $150; total, $3,524.35, being $87.88 per year, costing .0234 per hour and furnishing 854 candle power per hour for one cent.

The water power cost $210,000, but no part of this or any interest on it is charged to electric lights.

The wheel pit, costing several thousand dollars is not charged to electric lights. The plant is in very bad condition and will have to be entirely remodeled. The superintendent says. "the whole plant, poles, wire, lamps and dynamos need reconstruction."

Electrical Enterprise says: "In the auditor's report for last year there is a carefully itemized account of fifty different expenditures, ranging from fifty cents to $2.584.70 for labor, and no mention of five items that go to make up a considerable proportion of the cost of lighting in well-regulated companies. These are: (1), power; (2), interest on the cost of plant; (3), insurance; (4), taxes; (5), depreciation—five items that have been found expensive and unavoidable in electric lighting."

LISBON, Iowa, plant cost $15,000, 13 arc 2,000 candle power, moonlight schedule. Operating expenses, $927.40; interest @ 4 per cent, $600; depreciation @ 8 per cent, $1,200; taxes, $50; insurance, $25; total, $2,802.40; less income from incandescent lights, $1,188.16; total, $1,614.24, being $124.17 per year, costing .0566 per hour and furnishing 353 candle power per hour for one cent.

An advocate of Municipal Ownership published the statement that the expenses of the plant per year were $3,125, and that the income was $3,000 per year, that therefore the cost to Lisbon of 13 arc lights was $125 per year, being only $8.92 per lamp per year, while the facts as shown by the superintendent's statement, prove that each arc light cost $124.17 per year.

LYONS, Iowa.—Last year the city auditor, with two other officials, made an investigation of the operating expenses of the municipal plant for the past ten years, and they found that prior to January 1, 1897, the average expenses of the plant had been $113 per lamp per year, with a 1,200 candle power lamp operating on a moonlight schedule to midnight. These are the facts as found by the city officials, showing that the cost was .0773 per hour and only furnishing 155 candle power per hour for one cent.

MIDDLEBORO, Mass., as reported to the state commissioners. Plant cost $61,354.79, 105 arc 1,200 candle power, burned on the moonlight schedule, water power and pay nothing for the water. Operating expenses, $8,292.12; interest @ 4 per cent, $2,454.19; depreciation @ 8 per cent, $4,908.38; taxes, $681.42; total, $16,336.11; less total income

from commercial lights, $5,064.81; total, $11,271.30, being $107.34 per year, costing .049 per hour and furnishing 244 candle power per hour for one cent.

At the town meeting they voted to appropriate the sum of $10,000 to meet the deficiency caused by over drafts, and to give notes for same payable in 1905 and 1906.

The committee on manufactories of the Massachusetts legislature gave a hearing on a petition of persons in Middleboro who were dissatisfied with the way the electric light plant in that town was run.

The removal of a former manager seems to have created a good deal of trouble. When Mr. Mayne was removed, J. B. Ryder was chosen manager.

Mr. Mayne told the committee that Mr. Ryder had never had experience in running a plant and knew nothing about electricity.

An ex member of the Board of Commissioners said: "The plant was run more in the interest of politics than for the interests of the town." He said two members of the board had elected Mr. Ryder manager, he being a member of the board, and voting for himself. He said he was opposed to a member of the board being elected manager anyway. He was opposed to the election of any man who had no qualification for the position.

E. L. Baron said: "No man should be placed in the position of having to pass upon his own acts as manager, as he must if a member of the board."

Here is disclosed the working of Municipal Ownership and the way business is managed by politicians

The New Bedford Standard says: "Middleboro's experiment in the Municipal Ownership of a lighting plant shows that something more than the mere ownership of engines and dynamos and poles and wires is essential to the success of such a venture. Middleboro is a thriving place. It has an intelligent population. Many of its inhabitants are more than ordinarily successful business men. Yet the lighting experiment under the direction of the town is confessedly a flat failure. It is horrible costly, so costly, in fact, that it is impossible to figure out one of those rosy statements with which the advocates of municipal lighting plants are wont to regale the people. We have heard it intimated that there has been bad management. There certainly has not been harmonious management.

MARQUETTE, Mich.—The statement has been published and sent broadcast that the total cost of production for a full arc was only $40 per year.

The Mayor stated in his annual address that there was a profit of between $4,000 and $5,000 a year, and said the business could be extended. "In fact in the very near future by the careful management of this property on the scale which we have adopted and which we now believe in, this city can be run without a cent of taxation upon its property, either municipal, state or county out of the profit to be realized

rom this electric plant." These are the bombastic utterances of a politician just before election who wants votes, and is the statement that advocates of Municipal Ownership have fondly alluded to in all their arguments and notices, and his theory sounds very soothing to taxpayers.

The Marquette Mining Journal, a paper published in that city, reveals the true condition and the result of a municipality engaging in a business enterprise:

"A visit to the new works at the city's electric lighting plant just now will reveal a condition of things shamefully discreditable to the Jacobs administration, and provocate of profanity on the part of the visitor, if he happens to be a taxpayer.

"The new dam, in the construction of which a large amount of money has been expended, is a complete wreck, and will have to be almost wholly, if not entirely, pulled down and rebuilt. The water pours to the bottom, and finds its way to the natural bed of the stream without any obstructson save what is put in its way by the mass of timbers put together under the direction of an opinionated and incompetent board, in the fond but foolish belief that it was building a dam that would hold the waters of Dead river and furnish power for the new water wheel (already purchased) to drive the big dynamo (already contracted for) which is to furnish the city with additional light and power to meet all demands, and which would stand for all time as a monument to the administration of Mayor Jacobs and the wisdom of the men to whom he entrusted an important public work!

"At a rough estimate, it will take between $10,000 and $15,000 to put the new work at the lighting station where it was supposed to be at the time the contract for the new electrical machinery for the plant was contracted for. The dam is practically gone; the subsidiary dam below the main dam, put in to drive the river into the new course provided for it, is gone, and an extensive and expensive system of cribbing, to control the water there will have to be put in. Work on this is now under way. It is quite safe to say that not less than $15,000 will have to be expended on the dam and this crib work before the new power can be utilized, and all this is work that the board supposed was done, and done to stay, when it asked the Common Council for the last appropriation of $10,000 to buy the electrical machinery required for utilization of the power it expected to develop with the new water wheel.

"The improvement which Mr. Pendill assured the Council could be completed for $10,400 had cost about $22,000 when the additional $10,000 for the purchase of the electrical machinery needed for its ultimate utilization was asked for. This the Council also voted, but reluctantly, and after considerable pressure had been brought to bear, the determining argument with the council at that time being that, $22,000 having been expended in obtaining power, it would be bad business policy not to invest the additional $10,000 asked for to render that investment available for revenue, and for the accommodation of people in the city who wanted power and lighting service.

"No sooner was this last appropriation voted than the board let the contract for the electrical machinery required to deliver 400 horse power in the city. The new water wheel had already been purchased and was on the ground, ready to be put in place. Then the board proceeded to complete the dam and flume. Work on the dam was pushed during the winter months, when it was necessarily prosecuted at a much greater expense than would have been the case had it been done during the warm season. A force was also employed in getting the foundation for the new water wheel ready, and the board announced that it would be prepared to furnish additional lighting service, and such power as there might be a demand for, early in the spring.

"To sum up, the board has bungled from start to finish, and has expended many thousands of dollars in experimenting with the theories of Mayor Jacobs, in exploiting an improvement that the people of the city did not want undertaken when it was begun, and which the Council was dragooned by Mayor Jacobs and his supporters into authorizing, a year ago.

"The facts here given are published only when to longer suppress them would be to refuse to bring to the notice of our people the costly blunders of an incompetent and stupid administration, who dictated the course pursued by the Electric Lighting Board in the prosecution of a work it set out to do at a cost not to exceed $10,400, but which will cost $50,000 or over before it is completed.

"The Mining Journal has been a consistent and persistent advocate of Municipal Ownership of lighting systems. In view of the conditions to which Marquette's lighting plant has been brought during a single year by bad management, and bearing in mind the fact that the people have deliberately voted to bring about the state of things which they now deplore, the Mining Journal is disposed to reverse its former opinion and to admit that Municipal Ownership and control of such plants is a failure."

MARIETTA, Ohio, plant cost $18,000, 112 arc 2,000 candle power, moonlight schedule. Operating expenses, $4,442.47; interest @ 4 per cent, $720; depreciation @ 8 per cent, $1,440; taxes, $180; insurance, $100; total, $6,882.47, being $61.45 per year. We have accepted the amount of operating expenses as given by the city clerk, but as the account is itemized it enables us to ascertain how it is made up.

Total superintendent's salary for the year is given as $480. Lineman's salary $180. The absurdity of securing a competent lineman for $15 per month. They also use natural gas for fuel only costing $82 per month for the entire plant. Then clerk says there should be added $125 as interest on the investment of $18,000. What rate per cent for interest is $125 on $18,000?

This is the way that the cost of the lights is ascertained and the taxpayers led to believe that is all they are paying.

The superintendent has charge of city building, city prison and part of fire department, and that most of his salary is charged to those de-

partments, and that city prisoners' labor is utilized in the business. After charging all these items to other departments with the benefit of natural gas for fuel, the lights cost them .028 per hour and only furnish 715 candle power per hour for one cent.

Parkersburgh, a city in same locality, is lighted by a private company and everything furnished at a cost of .025 per hour and furnishing 781 candle power per hour for one cent.

The superintendent writes: "I, as superintendent of lighting plant, have also charge of the theatre situated in the upper story of city building, the light plant and fire department. Some of the men give service in several departments, for which they draw pay not shown in the enclosed statement."

MONTPELIER, Ohio, plant cost $16,000, 33 arc 2,000 candle power. Operating expenses, $2,116.65; interest @ 6 per cent, rate paid, $960; depreciation @ 8 per cent. $1,280; taxes, $150; insurance, $100; total, $4,606.65; less income from commercial and incandescent lights, $2,265.12; total, $2,341.53, being $70.95 per year, costing .0378 per hour and furnishing 520 candle power per hour for one cent.

They burn the sawdust and refuse from the mills, costing about one-half what coal would, and run the waterworks and electric plant together with same boilers, engines and men. In the above calculation only one-half of the operating expenses are charged to the light department.

MACON, Mo., plant cost $50,000; 40 arc 2000 candle power. The electric light and waterworks run as one plant and no way of separating accounts. The operating expenses, including interest, depreciation and taxes, amounted to $11,300, charging only one-half to the electric lights gives $5,900 for the year; less income from incandescent lights, $2500, leaves a net expenditure of $3400 for 40 street lights, being $85 per lamp per year, costing .0226 per hour and furnishing 884 candle power per hour for one cent.

They had to close down for repairs on June 1, 1896, and started again after repairs were completed on Jan. 1, 1897. They run from that time until June 20, 1897, when a storm damaged the plant and they were compelled to shut down again for ten days in order to make necessary repairs and replace an armature that was burned out. In the cost of operating given above the losses occasioned by these shut downs and loss of armature are not considered or calculated as part of the expense.

MATTOON, Ill., plant cost $20,000; 103 arc 2000 candle power, moonlight schedule. Operating expenses, $3,800.57; interest @ 4 per cent, $800.00; depreciation @ 8 per cent, $1,600.00; taxes, $150.00; insurance, $100.00; total, $6,450.57. Being $62.62 per year, costing .0333 per hour and furnishing 600 candle power per hour for one cent.

MARSHALLTOWN, Iowa.—Of all the wild, unreliable reports we have ever examined, the Mayor's report of this city takes the lead.

He says they paid $12,000 for the plant not including the building or boilers. After running the plant several years they took out the two 80-light arc dynamos and purchased two 75-light dynamos, paying $4,500 more, making the cost of the plant $16,500.

The Mayor says that total expense to the city for labor is $720 per trimmer and $180 per year for all other wages to run an 80 H. P. engine and 98 arc lights, and he claims it only cost them $135 a year for coal to run this 80 H. P. engine. Just think for a moment; 45 cents per day to to run an 80 H. P. engine.

Then he says running expenses, carbons and repairs are $200 per annum. What are we to think of such statements when the carbons alone, even at $8 per thousand, would cost over $400 per year. On this basis he tells the Mayors of other cities that all the lights cost is $12.50 per year per light. This statement would be too ridiculous to notice or answer, were it not for the fact that it was made to the Mayors of other cities who do not know the facts and so deceive the taxpayers in their own cities by repeating the statement as though it were true and that was the total cost of the lights. In the first place they bought two dynamos which at that time cost over $4000. These they now have stored away and they cannot be sold for more than $600. Here we have a net loss to the taxpayers on this item alone of $3400, caused by this exchange.

Then the absurd statement that the total pay roll was $900 per year, when they employ one man at $1,020 per year and two at $1,440 per year and one at $600, making $3,060 per year for labor. Suppose they only charge one-half of this to electric lights, it would be nearly double the amount he claims it cost.

The true cost to the taxpayers is about as follows: Operaitng expenses, $2,500.00; interest @ 5 per cent, $825.00; depreciation @ 8 per cent, $1,320.00; taxes, $150.00; insurance, $100.00; one-eighth of loss by exchange on dynamos, $450.00; total, $5,345.00. Being $54.54 per year, costing .0373 per hour and furnishing 321 candle power per hour for one cent. This is on the basis of 98 lights but they only run 60 lights part of the year.

On this basis nothing is calculated for the cost of the building or boilers. Cedar Rapids, another Iowa town, contracts with a private company for their lights and it only costs them .024 per hour and they are furnished with 833 candle power per hour for one cent. Nearly three times as much as this wonderful plant at Marshalltown produces.

MARBLEHEAD, Mass.—As reported to the State Commission, plant cost $77,093.52, 167 arc burned as 2000 candle power until 10:30 p. m., rest of time as 1200 candle power, moonlight schedule. Operating expenses, $9,275.74; interest @ 4 per cent, $3,083.74; depreciation @ 8 per cent, $6,167.48; taxes, $1,083.00; water rent, $351.00, total, $19,961.96. Less total income from commercial lights, $3,211 77; total, $16,750.19. Being $100.30 per year furnishing 1200 candle power lamps most of the time. Before the plant was installed the tax rate was $16,

now it is $20.20. They borrowed $5,000 more for construction to be assessed in the taxes for 1896, 1897 and 1898.

MARLBORO, Mass., contracts with a private company for lights at $90 per year burning every night in the month.

MADISON, N. J., plant cost $35,000; use 414 incandescent lights for streets. Operating expenses, $7,384.72; interest @ 4 per cent, $1,400; depreciation @ 8 per cent, $2,800; taxes, $350; insurance and water rent, $250; total, $12,184.72; less income from commercial lights, $6,300; total, $5,884.72, being $14.21 per year for 32 candle power incandescent lights.

The same men run the waterworks and electric lights. Notwithstanding the waterworks only run about two and one-half hours per day, they charge one-half the total running expenses to that department.

MORRISVILLE, Vt., has a water power plant that cost $24,000, running 21 arc 2,000 candle power lamps every night until midnight.

Their operating expenses, depreciation, interest and taxes amount to $4,790.68; less income from incandescent lights, $2,255.10, leaves $2,835.58, as the cost to the taxpayers of running 21 arc lights until midnight, being $120 74 per lamp per year, costing .0643 per hour and furnishing 311 candle power per hour for one cent.

MIAMSBURG, Ohio, moonlight schedule, using steam power. The plant cost $17,000. They burned lights 2,190 hours at a cost of .0434 per hour, furnishing 460 candle power per hour for one cent.

MARTINSVILLE, Ind., moonlight schedule until midnight, using steam power. The plant cost $6,000. Lights were burned 1,460 hours at a cost of .0464 per hour, furnishing 431 candle power per hour for one cent. The power is furnished by a private company for $90 per month.

MADISON, Ind., moonlight schedule 21 nights per month, with steam power. The plant cost $22,000. They burned the lights 1,460 hours at a cost of .0696 per hour, furnishing 287 candle power per hour for one cent.

MARSHALL, Mich., moonlight schedule with water power. The plant cost $45,000. They run the lights 2,190 hours. After deducting all income from commercial lights the cost was .0450 per hour, furnishing 444 candle power per hour for one cent.

MARSEILLES, Ill., every night all night, with water power. The plant cost $4,600. They burned the lights 3,750 hours at a cost of .0232 per hour, furnishing 861 candle power per hour for one cent.

MEADEVILLE, Pa., all night every night, using steam power. The plant cost $20,000. They burned the lights 3,910 hours at a cost of .0281 per hour, furnishing 711 candle power per hour for one cent. At first the

running expenses were $3,500 per year, now they are $5,000. They claim that only three men are employed. They burn the lights all night every night in the year. To do this the engineer would have to run all night and do his own firing of boilers, also clean his engine and boilers after the night's run, requiring his time for at least sixteen hours per day. Is it reasonable to suppose that one man does this? Must we not infer that other men are employed and the rest of their wages charged to some other department?

NORTH ATTLEBORO, Mass., as reported to the state commissioners. Plant cost $53,620.87, burn 580 32 candle power incandescent, on moonlight schedule until midnight. Operating expenses, $7,199.66; interest @ 4 per cent, $2,144.83; depreciation @ 8 per cent, $4,289.66; taxes, $357.47; total, $13,991.62; total income from commercial lights, $4,073.77; total, $9,917.85, being $17.09 per year for a 32 candle power incandescent lamp only run until midnight.

Only one-half of wages, office expenses, etc., are charged to electric light.

NORTH EAST, Pa, every night until midnight, using steam power. The plant cost $4,000. They burned lights 1,875 hours, costing .0386 per hour, furnishing 518 candle power per hour for one cent.

NORTHFIELD, Vt., has a small water power, an enterprising agent, who was anxious to sell apparatus, convinced the trustees of the village that there was a mint of money in Municipal Ownership by lighting the village and furnishing all parties with electric power.

The plant was installed and the agent paid for the apparatus which he had managed to sell.

They made a contract with everybody who could be induced to adopt the power, basing their charge upon rates when water power was used.

Everything was lovely and everybody happy until it was discovered that the entire water power would not run their apparatus in accordance with the contracts they had made. The only way out was to put in engines and boilers and carry out the contracts made on the basis of water power with steam and the use of coal.

The plant has cost $40,042.29. They are using 250 incandescent lights for streets, equivalent to 45 arc 2,000 candle power. Expenses last year, $9,524.65; interest @ 5 per cent, $2,002,11; depreciation on $20,000 only @ 8 per cent, $1,600; making a total of $13,126.76 for the year. Less total receipts for power, lamps sold, rent of meters, rent of tenements, lights, wiring, meters sold, unpaid accounts, coal on hand and all supplies amounting to $5,081.88, and we have $8,044 88 as the net cost per year of the street lights, being $178.77 per lamp of 2,000 candle power.

Many of the items included in the credits belong to other departments and should not be deducted, but all have been placed to the credit of the plant.

After plant was installed it was discovered that the water wheels would not answer and new ones, costing $4,400 had to be provided. The dam failed and a new one must be built at an expense of $4,297.52. In the above calculation, both of these expenditures are charged to construction, although they really are repairs.

The tax levy before plant was installed was 30 cents on the dollar, now it is 50 cents on the dollar. The indebtedness of the village before plant was purchased was $2,082.91, now it is $46,248.03.

The system has not only increased the tax levy 20 cents on the dollar, but has also increased the interest account $2,208 per year. How have the taxpayers been benefited by Municipal Ownership.

NEWARK, Ohio, has 200 arc lights. The operating expenses were $7,323.56; interest, $2,200; depreciation, $4,000; taxes and insurance, $500, making a total expense of $14,323 for the year, being $71.61 per lamp per year.

Many items belonging to the expense of electric lights were charged to the general fund, and are not included in above expense account.

NEWARK, Deleware, plant cost $6,500, 49 incandescent street lights. Operating expenses, $2,371.91; interest 5 per cent on bonds, $325.00; depreciation @ 8 per cent, $520.00; taxes, $25.00; total, $3,241.91. Total income, $1,941.29; total, $1,300.62. Being $26.54 per year for incandescent street lights.

OXFORD, Ohio, plant cost $25,000, 42 arc 2000 candle power, moonlight schedule. Operating expenses, $4,228 08; interest @ 4 per cent, $1,000.00; depreciation at 8 per cent, $2,000.00; total, $7,228.08. Total income electric plant, $3,426.52; total, $3,801.56. Being $90.51 per year, costing .0413 per hour and furnishing 484 candle power per hour for one cent.

A comparison of their reports for 1896 and 1897 shows that their repairs in 1897 were nearly three times as much as they were in 1896; also the total cost of carbons is given at $43.90 for the year. They claim to have burned 42 street lights and several arc for private customers. Therefore they would have to use at least 25,000 and at the low figure of $8 per thousand would be $200 per year instead of $43.90 as reported.

They paid $25,000 for the plant in 1890. They say that they can duplicate it to-day with $12,000. If they can buy the same kind of a plant new for $12,000 of course the old plant would not be worth any more than that, therefore the taxpayers have sunk $13,000 on the plant. In the above calculation only one-half of the expenses given in their report are charged to the electric department and the expense for carbons is taken as they reported them, and no part of the $13,000 sunk on plant included.

If this were added to cost of lamps it would add $44.21 per year per lamp, and this amount would have to be added each year for the past seven years. This would make the real cost to the taxpayers $134.72 per year per lamp; in addition to this they have $12,000 invested in a plant that is badly worn and antiquated, upon which there must eventually be an additional loss. Would not the taxpayers have saved money if they had not taken up this business enterprise with its hazard and constant changing values of electrical apparatus?

With a condition as shown by the report of Oxford, and the street lights by their own report costing $90.51, the theorists are circulating the following statement: "Oxford, Ohio, has a municipal plant and the profits from the commercial and incandescent lights pay all of the expenses of the plant and furnish the street lights without cost to the taxpayers."

PHILADELPHIA GAS WORKS a failure, millions involved. The Municipal Gas Plant that advocates of Municipal Ownership have cited time and again as an illustration of the benefit to be derived where a city owned the plant, has been proven an utter failure and been leased to a private company for thirty years.

The strongest argument against Municipal Ownership of the century. After a practical experience of over thirty years and a loss of millions of dollars the system has been abandoned. Advocates of Municipal Ownership have proclaimed before every committee and in every paper published favoring the system that they were making money. When the truth is known and the secrets of the huge political machine is exposed it discloses the most stupendous fraud, mismanagement and deceptive bookkeeping ever conceived.

In the first edition of Municipal Ownership and its Fallacy, positive proof was given that the taxpayers in Philadelphia were losing money in their gas works. This was denied by the politicians and socialists, but time has demonstrated that the author's statement made ten years ago was correct and if his suggestions had been adopted the taxpayers would have saved millions of dollars.

The **Philadelphia Times** says: "It is now pretty well agreed by all practical and intelligent men who have made a study of the subject that a lease of the gas works, under proper conditions, is for the best interests of the public; and as a matter of fact, the opposition to the ordinance in question is confined to a small body of visionary theorists who deal with fancies and not with facts, to certain envious speculators who want to be 'let in,' to a few politicians whose ability to get and keep their supporters on the gas works' pay roll is the chief part of their stock in trade and to certain employes at the works who are afraid that if the lease goes through they will lose their jobs."

The **Philadelphia Ledger** says: "The city has heretofore suffered, not only from bad gas and profligate management, but from the mechan-

ations of a political clique deriving a large part of its power in municipal politics from the patronage of the gas works. Bad government in all departments has thus resulted from city management of the gas works. The lease of the works to a private corporation will put them under a business administration which cannot afford to employ men for anything but their services in making gas. This is to many minds the controlling reason for leasing the works. The city has tried in vain to get a business-like administration of the works; it can surely get it by means of the lease. The certain removal from the works and from their pernicious political activity of the 'rounders' and 'heelers,' who are so largely employed therein, and who receive hire and salary from the City Treasury chiefly for supporting and keeping in dangerous power and position the political bosses at whose sole instance they have been appointed to the gas works."

To get rid of this venal and corrupt political machine would be to take a long step toward good municipal government, as it would be to destroy the strongest and most dangerous of all the political jobbers' strongholds.

The **Philadelphia Record** says: "By a lease for a term of years the city can have its property put in good order, obtain from it a stated revenue, and secure to the consumers of gas better and cheaper illumination. If those officials whom the voters of Philadelphia select to manage their municipal affairs would secure for the gas works expert business management instead of political management, expend in repairs and betterments the money needed, and allow gas to be manufactured under capable and efficient direction a lease of the works would be unnecessary and improvident. But that is out of the question. The political machinists will not tolerate capable and honest management."

The **Philadelphia Evening Item** says: "But every one knows that so long as the gas works are under municipal control, politics and not business methods will mark the management. The question, then, comes right down to this point: 'Is it better for the city to continue the control of the works, or is it wise to convert a drain upon the treasury into a rich revenue by passing the works from political into private management'?"

The **New York Commercial Advertiser** says: "For many years the city of Philadelphia has presented a valuable object lesson in Municipal Ownership of franchises. It has conducted the city gas works by the usual methods that prevail in American cities. That is to say, the works have been part of the city political machine. Under our system they could not be anything else. There has been the usual result of extravagance and inefficiency. Gas has been high and poor, management has been costly and the plant has deteriorated by neglect.

"Consumers rebelled and demanded reform. The city could not improve its own management, reduce expenses and cheapen gas.

"Nearly all experiments in Municipal Ownership of franchises in this country have the same discouraging result and lead to the common conclusion that the method is not adapted to our political system."

The **Times-Herald**, Chicago, says: "Municipal Ownership a failure. The voting of the $40,000.000 gas plant of Philadelphia to a private corporation by the Common Council of that city is the climax of the most conspicuous failure in the way of Municipal Ownership that has been chronicled in this country.

"Before we can have Municipal Ownership of public utilities there must be a complete and radical change in our form of municipal government.

Fifty years of Municipal Ownership in Philadelphia has proved a costly failure, because it is impossible to keep politics out of a gas bureau so long as it is operated as a department of the city government, and so long as dishonest men are elected to the positions of civic trust.

"There can be no Municipal Ownership until there is municipal honesty."

The **Daily Eagle**, Brooklyn, says: "The demand that the gas plant be turned over to the United Gas Improvement Company, to which the Common Council has just yielded, came from many of the best people in the city. Mass meetings were held and prominent men made speeches declaring that the city had been unable to manage its plant successfully, and that the gas supplied was poor and that the business was conducted at a financial loss. The plan has appealed to the common sense of the people. The opposition has come from two sources: The politicians, who have used the patronage of the gas works, did not want to give them up, and academic theorists, who believe that the city should own its lighting plants and its transportation plants, did not want Philadelphia to confess that the experiment of public ownership and operation had been a failure. It is a sign of promise when the people demand that inefficient government shall be made efficient. It is a sound principle that whatever can be done better by the citizens than by the state should not be attempted by the state. And in spite of the efforts of the socialists it has not yet been disproved that that government is the best that governs the least."

The **Advertiser**, Portland, Me., says: "The reasons are the old ones of incompetency and dishonesty. The works have fallen into the hands of the politicians and the official spoils and the contracts for materials and services have been used for the purposes of the ward leaders and petty politicians until the conditions have become scandalous and intolerable. Nothing better perhaps, could be expected of a city so ridden by venal politicians and so corrupt politically as Philadelphia, but in New York or Chicago it would be the same. Until the moral level is lifted in the large cities, Municipal Ownership is inadvisable."

The **Democrat**, Holyoke, Mass., says: "Philadelphia's municipal gas plant is a rank failure and the Mayor is trying to sell it to private

parties. He says that the plant cannot be maintained except by increasing the tax rate, while repairs and necessary improvements will cost $5,000.000 in the next three years.

"The Democrat said the other day that there were two sides to the Municipal Ownership question. This is the other side."

The **News Letter**, San Francisco, says: "In this country the clamor for public ownership and operation of gas, water, telephones and the like, has been loud and strong, but gives forth signs of having almost spent itself.

"What then has been the experience with its gas works of this fairly well governed American city. It is sick and tired of its experiment of public ownership, and is now clamoring to have its gas works leased to the highest private bidder. They have led to scandals innumerable, have fallen behind the times in point of efficiency, have at the instance of the politicians hired three men where only one was necessary, have contributed campaign money to the Bosses, have supplied inferior gas at higher prices than private owners would have done, and withal have lately been doing a losing business. The old and reliable Ledger says that 'unless the works should be leased, the city would have to expend millions of dollars in entirely rebuilding its plants. Finally, the leasing would get rid of the most corrupting force in municipal politics—a force which has cost the city untold millions in indirect ways.' Under Municipal Ownership the plant has become so dilapidated that it will cost the company that proposes to lease it $10,000,000 to put it in a renewed and modern shape."

The **Times-Herald**, Chicago, says: "Municipal Ownership a failure. Advocates of the municipalization of gas plants would do well to look into Philadelphia's unprofitable experiment in that line. Every argument that is now advanced in support of Municipal Ownership of gas plants was employed to induce the city of Philadelphia to purchase and operate the gas lighting systems in that city.

"Among the inducements held out were promises of cheaper and better gas, improved distribution and a nonpolitical gas service. None of these promises has been fulfilled. The fact is the municipalization of gas plants by the city of Philadelphia has been a monument of fraud, mismanagement and deceptive bookkeeping. A legislative investigation has resulted in revelations of such barefaced fraud and such flagrant betrayal of the public in the management of the system that the business sentiment of the city is now strongly in favor of leasing it to a private company.

"It is useless to argue that Philadelphia's mismanagement of her gas works cannot be regarded as an argument against the general principle of Municipal Ownership.

"The government of Philadelphia is no worse than the governments of most American cities. If it was a failure there no amount of theorizing will persuade practical people that the best service and the best and

cheapest gas can be secured through Municipal Ownership and control of gasmaking plants."

The **Times-Star**, Cincinnati, says: "There is a mistaken idea current that Philadelphia found its management of a gas plant profitable.

"What makes this deficit still more embarrassing, and still more forcible as an argument against the socialistic idea of Municipal Ownership, is the fact that no account is taken of the interest on the investment, neither is an account of the deterioration of the plant taken, two important factors which every careful manager of a corporation figures on at the beginning of his calculations. The people of Philadelphia have considered every phase of this question and are very anxious to shift the burden. They want to lease their plant to some private company that will run it upon business principles."

The **Leader**, Cleveland, says: "A glaring failure of Municipal Ownership. For many years Philadelphia has tried the Municipal Ownership and operation of her gas works, and now she is sick of it and wants to quit. That is not to be wondered at.

"Not only has Philadelphia failed to make a profit on the manufacture and sale of gas, but the works have actually been operated at a loss, while the quality of gas, which costs twenty cents a thousand more than in Cleveland, is constantly deteriorating. Furthermore the works are in such condition at present that 25 per cent of the gas made is lost in leakage, and the necessary repairs to prevent that loss would cost the city $5,000,000 if made.

"This seems to be one of the most glaring instances of the failure of Municipal Ownership on record, but it is a great deal worse than indicated above. While the works have been operated at a loss, the city has failed to manufacture for some time more than three-fifths as much gas as was required for consumption. The remaining two-fifths have been purchased from private manufacturers and turned into the city mains. The gas which was purchased last year cost the city thirty-seven cents a thousand cubic feet, and it was sold at $1. That gave a clear profit of sixty-three cents a thousand feet on two-fifths of the supply and yet there was a loss on the total supply."

The **American**, Philadelphia, says: "In giving his reasons for approving the gas lease ordinance the Mayor incidentally remarks: 'It is a grave question in my mind whether or not any municipality should operate any manufacturing industry.' It is indeed a grave question, and it is worthy of graver consideration than it is likely to receive just at present. This paper has for at least a quarter of a century gravely questioned the policy of municipal competition in production. A government is a monopoly in its very nature, and it is a monopoly that can tolerate no competition whatever. The proper resources of a government consist in taxation and its proper income must be derived from taxation in some form. When a municipality engages in production it destroys all competition in the line it takes up It is the entire

community, in organized form, exercising plenary powers against individual enterprise. The battle is hence too unequal to allow any competition. The effect of such a policy is to suppress individual effort, and hence to embarrass legitimate enterprise. That it is never good policy to embarrass individual effort in the matter of production must, we suppose, be admitted. This city has for many years been a large manufacturer of illuminating gas, and for the greater part of the time it has furnished the product at an exhorbitant price to the general consumer. It has been able to sell every cubic foot of gas it has made at remunerative prices. Despite this monopoly of production the city has not been able to maintain its plant in such condition as characterizes such plants operated by private parties.

"Yet with the field all at its command and commanding a large price for its product, the city should have to-day a plant second to none in the world. Why has it failed to keep its property abreast of the age? We must assume that with unlimited capital it could have purchased the raw materials at the bottom market price. It could have procured all that enters into the betterment of the plant as reasonably as any private company. It should have manufactured as good a quality of gas as is produced anywhere in the United States. By extending its plant it should have been able to produce gas in any quantity required by consumers. It should have renewed its mains wherever renewal was demanded by all rules that govern private business, thereby reducing the loss from leakage. But what one of these necessary things has the city done and done permanently and effectively? The plant is out of repair, it is behind the times in producing capacity, it has not always, nor, as specifically charged more than once, generally purchased its supplies at the bottom prices; it has not furnished gas of uniformly good quality or in sufficient quantity. Under the circumstances the operation of the gas plant by the city has been a failure when compared with service by private companies.

"And the reason is not far to seek. The gas plant has for years and years been a political machine, and a sort of duplex machine manufactured by both political parties. And, as always happens under such circumstances, the establishment has become an infirmary. We cannot dignify it by calling it a hospital. It is a sort of temporary clearing-house for political bosses, and its settlements are in the nature of rewards bestowed with reference not to individual deserving, and not with reference to the public good, but for services rendered to individuals intent chiefly upon their petty aggrandizement. It is time this thing ended, and we can only hope it will end in the retirement of the city from gas making for a term of years. The lease of the plant would undoubtedly be a blow to a few persons, but it may prove a blessing to the million which has no particular interest in the plant except to pay bills, and for years has paid good prices for gas defective in quality and deficient in quantity."

The Evening News, Toronto, says: "It has been found in Philadelphia that municipal management of the gas works is a failure. It costs at least 25 per cent more to supply gas under civic management than it will when a company takes hold of it, in addition to which there have been innumerable scandals in connection with the service.

"The opposition of the News to Municipal Ownership and management of public franchises has been all along on the ground that city business cannot be conducted with the same economy as that of a private corporation, and in the operation of a service of that kind the waste consequent upon loose management is equal to a handsome profit for a company. The World has come round to this view."

The New York Commercial Advertiser, says: "No substitute can be found for private interest and the hope of profit in stimulating efficient and economical service. Public ownership would waste many times the profit of private owners, besides lowering the quality of service and condemning valuable property to decay by neglect. This is true of state as of municipal affairs. State socialism would inaugurate a reign of waste, inefficiency and corruption."

The New York Tribune, says: "If the works are not leased, the management will probably continue to be as corrupt and generally unsatisfactory as hitherto, and to furnish an 'awful example' against Municipal Ownership of such establishments, or against municipal management of them. Yet everybody knows full well that all the trouble lies in the fact that the department is controlled, not by business principles, but by politics, and not merely local politics, but state politics. It is simply the lack of non-partisan home rule that has made Philadelphia gas a synonym of rascality. The lesson is one which New York may well take to heart at the present time."

The Evening News, Toronto, Can., says: "Those advanced reformers whose 'principles' lead them to advocate municipal control of everything regardless of the probable cost, and who declare their preference for civic management under any and all circumstances, have a lesson to learn from the city of Philadelphia. Indeed, in the past that city has been quoted as a leader in the municipalization movement, because it owns the gas works and sold gas to the consumers at $1 a thousand. Already it is said to be 'sick and tired of its experiment of public ownership and is clamoring to have its gas works leased to the highest bidder.' The operation of the gas works as a municipal bureau has led to innumerable scandals; three times the number of men actually required have been employed, the plant has been allowed to run down, and is now behind the times; and inferior gas has been supplied at a price in excess of what private corporations have offered to sell it for."

The Post-Express, Rochester, says: "Is it possible that human experience has no value? While Philadelphia is disgusted with the incompetency, extravagance and corruption of Municipal Ownership, two west-

ern cities are about to try their hands at it. Chicago proposes to establish a municipal electric lighting plant, and Sioux City, Ia., will soon assume the ownership of its street railway lines. Will they have any different experience with their commercial enterprises than Philadelphia has had with its gas works? According to the Philadelphia Ledger, the administration of these works has been 'grossly incompetent, extravagant and corrupt.' It has, moreover, constituted 'the chief and apparently impregnable stronghold of venal politics and bad government.' Is there anything in human nature either in Chicago or in Sioux City that will save those municipalities from the same evils? Certainly there are no more saints among the politicians in Chicago than in Philadelphia. Indeed, it often seems, as one reads the newspapers of that city, as if there were less. Only last winter they were filled with stories of official venality in connection with the construction of public schools and the granting of municipal franchises. Were the city to go into the electric lighting business, calling into existence a great public department with hundreds of employes, who can doubt that in a few years it would become, like the gas bureau of Philadelphia, 'the chief and apparently impregnable stronghold of venal politics and bad government?' We do not. Nor do we believe that the experience of Sioux City will be any different."

PAINESVILLE, Ohio. plant cost $20,000, 80 arc 1200 candle power, moonlight schedule. Operating expenses, $3,101; interest @ 4 per cent, $800; depreciation @ 8 per cent, $1,600; taxes, $200; total, $5,701. Being $71.26 per year, costing .038 per hour and furnishing 315 candle power per hour for one cent.

In the report for this plant carbons are given at $7 per thousand, total expense $150 for the year. If 80 lamps were burned it would require at least 48,000 carbons, which at $7 per thousand would cost $336 instead of $150 as given.

PEABODY, Mass., as reported to the State Department. Plant cost $66,374.09, 161 arc 1,200 candle power, burned all night. Operating expenses, $11,009.00; interest @ 4 per cent, $2,654.96; depreciation @ 8 per cent, 5,309.92; taxes, $746; total, $19,719.89. Less total income, $3,658.11; total, $16,061.78. Being $99.76 per year for a 1,200 candle power lamp and costing .0266 per hour and furnishing 451 candle power per hour for one cent. They replaced old dynamos with new ones and only received a credit of $600, but charged the whole to construction.

PAW PAW, Mich., plant cost $20,000, 32 arc 2,000 candle power, water power, moonlight schedule. Operating expenses, $4,381.19; interest @ 4 per cent, $800; depreciation @ 8 per cent, $1,600; taxes, $200; insurance, $1 0; total, $7,081.19. Less income from commercial arc and incandescent, $4,631.40; total, $2,449.79. Being $76.55 per year, costing .0349 per hour and furnishing 573 candle power per hour for one cent.

PORTLAND, Ore., every night all night, using steam power. The plant cost $42,830. They burned lights 3,750 hours, costing .0348 per hour, furnishing 574 candle power per hour for one cent.

PARIS, Ill., moon schedule to midnight, with steam power. The plant cost $12,000. They burned the lights 1,875 hours at a cost of .0523 per hour, furnishing 382 candle power per hour for one cent. The report of Mayor shows that one-half the men's wages are charged to other departments. They have burned out many armatures not charged in expenses.

PORTSMOUTH, Ohio, moonlight schedule, using steam power. They burned lights 2190 hours at a cost of .0481 per hour, furnishing 247 candle power per hour for one cent. The engineer's and firemen's wages were charged to the water department, and are not included in cost of lights. The running expenses at first were $3,600 per year, but they have already increased to $5000.

READING, Mass., as reported to the State Department. Plant cost $63,186.53, 112 arc 1200 candle power, burned until midnight 23 nights per month. Operating expenses, $8,531.45; interest @ 4 per cent, $2,527.46; depreciation @ 8 per cent, $5,054.92; taxes, $631.86; total, $16,745.69. Total income from commercial lights, $1,192.15; total, $15,552.94. Being $138.86 per year for 1.200 candle power lamps, burned until midnight 23 nights per month, costing .0951 per hour and furnishing 126 candle power per hour for one cent.

RICHMOND, Va., has a gas plant owned by the city and we are told that its success is remarkable and the citizens perfectly satisfied with the system.

If this was true it would seem very singular that there should be the most bitter fight in progress there over the gas plant that the city has ever witnessed.

The dispute is over the question of selling the Municipal Gas plant to private parties.

The charter provides that this property cannot be disposed of without a vote at a regular city election. This requirement promises to develop a strange political contest.

The whites are divided on the plan of selling the plant. The negoes will vote to a man in favor of it. As there are many of the whites who favor it that party may win.

The city officials and politicians oppose it the same as was done in Philadelphia. They dread the loss of power which this gives them in an election.

The Times, Richmond, Va., says: "In the first place it is generally urged that the city can supply the people of Richmond with light at cheaper rates than private companies or individuals are able to do.

This statement is not borne out by the experience which our people have had with the gas works. Independently of the comparison, which is very naturally instituted in the popular minds, between the rates at which illumination by gas and electricity, respectively, can be supplied, the comparison being very strongly in favor of electricity, there has been a growing feeling of dissatisfaction with the price at which gas has been furnished. Even if there had been no competition between gas and electricity, it is doubtful whether the people of this city would have been long content to bear the burden of the present city charges for gas.

"Such has been the principal upshot of municipal control over this question of light. It has been monopoly which has led to general discontent.

"We have on previous occasions mentioned the general ground of objection to the establishment by the city, of an electric plant of its own; namely, the interference with the competitive rights of private companies and individuals, the enlargement of the circle of unnecessary officeholders, the diversion of a large amount of public money, which can be expended to more advantage in other public improvements, and the imposition upon the people of an additional form of paternal government.

"One of the greatest dangers of the present day is proportionately as great in the instance of muncipality as of any other government, and should be as carefully and systematically avoided, even if some additional expense or a considerable amount of inconvenience be imposed upon the people-at-large. But neither is under the special circumstances necessarily entailed."

ROCK FALLS, Ill., plant cost $10,197.24, 30 arc 2,000 candle power, burned 1,525 hours per year. Operating expenses, $3,623.88; interest @ 4 per cent, $400; depreciation @ 10 per cent as made by the Mayor, and he says none too high, $1,019.72; taxes, $25; insurance $25; total, $5,093.60; less income from incandescent lights, $1,936.82; total, $3,156. 78. Being $105.22 per lamp per year, costing .0689 per hour and furnishing 290 candle power per hour for one cent.

The Mayor says: "It will be noticed that I have figured a 10 per cent depreciation of plant. This is by no means a high estimate for property of this class and is one that it is absolutely necessary to take into consideration. It is a plain business proposition that any institution to be a safe, not to say profitable investment, must be capable of maintaining itself against depreciation, that the property may at any time be worth to its owner its original cost. There would be no surer way for the city to lose money than to run the electric light plant at a rate of income that only paid operating expenses. In the end the plant must become worthless through lack of maintenance and the original investment would certainly be lost."

It is shown by the foregoing figures that the plant ran behind. Where does this deficiency belong? The taxpayer expects to pay the

bonded indebtedness incurred by the light plant. He is willing to pay all expenses due to running and maintaining the arc service, but he rightly objects when asked to make up a deficiency for which he may not be responsible.

The street lights should be supported by and for the benefit of the general taxpayer, who rightly asks that he shall not be taxed for more than the fair maintenance of this service.

Money paid in by general taxation has been absorbed by the expense of the incandescent lights. It is certainly not justice to tax those who do not use incandescent lights for the benefit of those who do.

SHARPSBURG, Penn.—The superintendent reports that the waterworks and electric lights are all run as one plant and no separate accounts kept, but that charging 60 per cent of the expenses to the waterworks, and not including interest, depreciation or taxes, the arc lights cost about $55 per year. He also says that they could duplicate their plant for one half what they paid for it, and that the apparatus is all old type. Here is a loss of $10,000 to the taxpayers on depreciation. For if they can buy a new plant for $10,000, of course the old one would not be worth as much even as the new. After such experience and with such practical results, we are told there is no depreciation on an electric plant.

SWANTON, Vt.—An advocate for Municipal Ownership published a statement that the entire cost of an arc light in Swanton was only $10 per year, and that the village *was able to pay within one year, from the income of the electric plant, the interest on the whole cost of the plant, as well as the running expenses, and leave a balance on hand.*

What are the facts?

The plant is water power and cost $42,707.21. Their last fiscal report shows as follows: Operating expenses, $2,436,54; interest, $2,104.81; insurance, $119.78; total, $4,661.13. Add to this depreciation at 5 per cent, $2,135.05; taxes at 30 cents, rate voted, $1 050; total, $7.846.18. Total income from all sources, $4,964.71; total, $2,881.47. Cost of 20 arc street lights being $144.07 per lamp per year.

An examination of the official reports for three years shows the following results:

	1895.	1896.	1897.
Indebtedness	$38,866.64	$41,964.76	$42,767.21
Labor	844.26	994.45	1,013.06
Repairs	341.65	591.90	732.80

Showing a steady increase of indebtedness as well as expenses. Street lights cost in 1895, $95.17; in 1896, $115.79; and in 1897, $144.07. On the sixteenth page of the village report is a statement showing that the cost of running the street lights amounts to as much as all the other expenses of the village combined and requires one-half of the entire tax levied upon the grand list to meet the expenses of the electric lights,

which is shown when the trustees at the annual village meeting recommended a tax of 30 per cent—15 per cent for street lighting and 15 per cent to pay for all the other expenses of the village, including sewers, highways, sidewalks, fire department and general expenses. This shows the results of Municipal Ownership.

ST. CHARLES, Ill., lights streets with incandescents and after deducting all income from commercial lights the street lights cost $15.42 each per year.

ST. PETER, Minn., plant cost $17,000, 44 arc 2,000 candle power, moonlight schedule until midnight. Operating expenses, $4,500; interest @ 5 per cent, $850; depreciation @ 8 per cent, $1,360; taxes, $150; insurance, $25; total, $6,885. Less income from incandescent, $2,993; total, $3,817. Being $86.75 per year, costing .0594 per hour and furnishing 336 candle power per hour for one cent.

RUSHVILLE, Ind., moonlight schedule, using steam power; the plant costing $13,000. Running 2,190 hours, costing .0750 per hour, furnishing 266 candle power per hour for one cent.

STAUNTON, Va., moonlight schedule, using steam power. The plant cost $16,000. They burned the lights 1,875 hours at a cost of .0497 per hour, furnishing 241 candle power per hour for one cent.

ST. CHARLES, Mo., moonlight schedule, using steam power. The plant cost $17,000. They burned the lights 1,875 hours at a cost of .0421 per hour, furnishing 475 candle power per hour for one cent.

STATESVILLE, N. C., moonlight schedule, using steam power. The plant cost $9,000. They burned the lights 1,875 hours at a cost of .0355 per hour, furnishing 338 candle power per hour for one cent.

SHELBY, Ohio, moonlight schedule, using steam power. The plant cost $20,000. They burned the lights 2,190 hours at a cost of .0562 per hour, furnishing 355 candle power per hour for one cent.

ST. CLAIRSVILLE, Ohio, every night all night, using steam power. The plant cost $10,000. They burned the lights 3,750 hours at a cost of .0269 per hour, furnishing 743 candle power per hour for one cent. They run all night and every night in the year, and claim that only two men are employed to do all the work of running the engine, fireing, trimming lamps, repairing lines, in fact, the men must work 16 hours a day the year round. Do they, or are more men employed and their wages charged to some other department?

SAVANNAH, Mo., moonlight schedule until 12 midnight, using steam power. The plant cost $12,000. They burned the lights 1,460 hours at a cost of 10 cents per hour, furnishing only 120 candle power per hour for one cent.

SANTA CRUZ, Cal., steam power. The plant cost $16.500. They burned the lights 2,190 hours at a cost of .0759 per hour, furnishing 268 candle power per hour for one cent.

ST. JOSEPH, Mo., plant cost $96,000. An investigation was made last year for the purpose of ascertaining the cost to the city of the lights, and it was found that not including taxes, interest and depreciation, the expense to the city of producing their own light was $105 per lamp per year on a moonlight schedule With interest, depreciation and taxes added the cost is $38.17 more per year per lamp, making the whole cost per year $143.17 per lamp, costing .0658 per hour and furnishing 306 candle power per hour for one cent.

We are informed on good authority that a local company offered to furnish the lights for $75 per lamp per year and guarantee first-class service. It is well known by any one who has visited the city that the light service is the poorest possible. Notwithstanding this offer the politicians were afraid to lose the grip which the municipal plant gave them, so the taxpayers continue to put up the taxes to meet the loss occasioned by this plant.

SPRINGFIELD, Ill.—Dear Sir:—The directory transmit to you with unfeigned pleasure the third semi-annual statement of the Capital Electric Company (better known as the city's municipal plant). This organization, composed of sixty of our citizens, without compensation laid the foundation for securing to the city an electric plant without cost to the taxpayers, and have expended almost $100,000 in construction.

Please examine the statement carefully, the comparisons made and the result shown. Yours truly,

EDWIN A. WILSON, Secretary.

After the plant had run 18 months the Mayor employed experts to investigate and decide whether the city was being benefitted by the plan.

The following report of these experts to the Mayor does not show the business in a very satisfactory condition. Neither does it show the profit claimed. The report shows that the city's progress toward paying for the new light plant is greatly retarded and does not fulfill the expectations of the taxpayers.

Honorable Mayor, City of Springfield, Ill.:

Dear Sir:—At your request we accompanied the comptroller to the office of the Capital Electric Company, and there made an examination of its books of account and business generally, upon which we beg to report as follows:

The company was incorporated under the laws of this state in October, 1894. The capital stock ($60,000) was fully subscribed for by sixty citizens, but has never been issued and has never been paid for.

The applications for shares are in the hands of the treasurer of the company, in trust as security to the banks for borrowed money.

The agreement under which the company furnishes electric light to the city of Springfield is in the form of a written proposition dated Oct. 30, 1894. Same provides that the city shall pay the company out of the street lighting fund at the rate of $113.33 per annum for each arc light used.

The company agrees to take this sum, and after "paying the current expenses incurred in operating said plant," and interest on the money borrowed to erect the plant, will credit the city with any balance remaining, thus creating a fund with which it is proposed that the city may ultimately purchase the plant.

The company, having borrowed money ($75.200) from some of the local banks for the purpose, purchased three lots on Tenth and Reynolds Streets and erected thereon an electric light plant, equipped with six boilers, five engines, six arc light dynamos and two incandescent light dynamos. The company has also erected poles and overhead wires for 840 arc lights for the city lighting; 38 arc lights for railroad crossings; 14 arc lights for the village of West Springfield and about 50 arc lights for sundry customers, and has wired sundry residences, offices, stores and other business premises for incandescent lighting.

The company has in turn made a five years' lease with Messrs. W. T. McCaskey and Eugene Holcomb, contractors, to operate, maintain and repair the plant, and to provide all material and labor used in both arc and incandescent lighting. The lessees' remuneration is fixed at $60 per lamp, per annum, for city arc lights; 6 cents per thousand watt hours for the incandescent lighting of the city hall and engine houses, and 75 per cent of the gross receipts on all other lighting.

It is further stipulated that the lessees will pay the company interest at 7 per cent per annum on all money invested in the plant.

From July 1, 1895, to Aug. 1, 1896, the company has paid the lessees $21,643.05 for street lights.

From July 1, 1895 to Aug. 1, 1896, the company has collected from its customers for arc and incandescent lighting, (including July lighting paid for in the current month) the sum of $13,971.12, out of which the company has paid to the lessees $10,478.33 (75 per cent).

Out of the gross earnings the lessees have been paid for lighting the city hall, engine houses and police headquarters the sum of $1,698.10, being the computed cost.

Out of the gross earnings the company has also defrayed the expenses of operating the business, as follows: Personal property and real estate taxes, $695.58; fire, boiler and cyclone insurance, $817.86; attorney's fees for defending company, $1,050; clerical hire for 14 months, at $75, $1,050; advertising and newspapers for circulation, $303.57; stationery, printing, postage and telegrams, $344.12; total, $4,261.08. These expenses include no charge for proportion of office

rent or telephone service. The allowance of $75 per month is for services of bookkeeper and collector, and is, in our opinion, a reasonable one.

The property of the company which has, during the last fourteen months, been used by the lessees—boilers, engines, dynamos, electrical apparatus, poles and lines—is subject to a severe and constant wear and tear, which is not provided for by the repairs made by the lessees.

In our opinion, the earnings of the company for the period examined, are subject to a charge in this regard of $9,252.97, being 10 per cent per annum.

The true condition of the company on the 1st of August, 1896, is shown below:

ASSETS.

Real estate and buildings		$10,770 84
Steam plant		17,039 28
Electric light plant, municipal		41,805 58
"Commercial"		20,466 36
Accounts receivable (collected in August, except a small amount)	$4,960 33	
Cash in bank	322 45	
Unexpired insurance premiums	669 44	
Interest paid in advance	706 33	
		$6,658 55
Claim against city for lighting fair grounds		1,400 00

LIABILITIES.

Bills payable	$74,749 84
Accounts payable	3,928 07
Fair grounds lighting (held in suspense, pending the collection of the claim)	1,400 00
Balance of net profit to date, to be credited to the city of Springfield (option account)	18,063 15
	$98,140 56

Discounts allowed to customers for early payment of light bills, and losses through failure of customers to pay for light, are not shown on the books—the register only contains amounts actually collected.

The plan on which the secretary has thus far conducted the bookkeeping of the company is briefly as follows:

The gross earning from city lighting are credited to "profit and loss account." When a sufficient sum has accumulated to cover the debit balance of "municipal plant" and "commercial lighting" the city will be entitled to take the entire plant.

If no further investments are made in electrical apparatus and business continues as at present the secretary's plan would mature in about five and a half years.

But we can find no assurance that the company will stand still. On the contrary, the progressive policy of the directors will probably prompt further investments to acquire new business. This will indefinitely delay the maturing of the city's option.

The lessees are authorized to make contracts for lighting for the supply of power. The lease stipulates:

"The company agrees to furnish and erect such additional apparatus and material as may hereafter be required to furnish proper current for additional lights and power which may thereafter be secured."

This means that if the lessees procured contracts to supply any any number of factories with electric current power the company would be obliged to provide the outfit.

With a view to the heavy and constant wear and tear that this class of machinery is subjected to—especially when operated by lessees—we regard it to be the best interests of the city to come into possession of its lighting plant just as soon as possible.

Our understanding is that, under the city's charter, it cannot engage in the commercial lighting business, and will therefore have no use for that part of the Capital Electric Company's plant.

An analysis of these statements discloses the following facts: The city paid the lessees for arc lights for 18 months, $31.560; the city paid the lessees for incandescent lights for 18 months, $14,058.36; the city paid for lighting city hall, $2,351.16; the city paid taxes, insurance, clerk hire, etc., $4,446; the city paid attorney's fees, $1,050; the city paid interest @ 7 per cent for 18 months, $10,434.88; the city paid depreciation @ 10 per cent, $13,877.45 (as made by city's own expert). Total, $78,169.85. Less income for commercial light for 18 months, $19,344.60; interest paid by lessees, $9,651.06, making a total of $28,995.66; total, $49,164.19. Above is for 18 months, therefore the yearly cost would be $32,776.08. Being $93.64 per lamp per year and $3.64 per lamp per year more than the local company offered to run the same number of lights for the same length of time and furnish their own plant.

The books do not show the discounts paid to customers or losses through failure of customers to pay their bills. Neither does it include a claim for lighting the fair grounds of $1,400; if these items were added it would increase the cost to the city. The original street lighting plant was estimated to cost only $60,000, while the cost already amounts to $99,379.98, therefore, instead of having money to the city's credit to go towards the purchase, they owe nearly $40,000 more than they did when they started.

The city has paid already $20,466.36 for commercial apparatus, and under their agreement this amount may be doubled, while the city charter prohibits their using this machinery when they come into possession of it, and will have to dispose of it at any price they can obtain, thus sinking thousands of dollars on this item.

The wisdom of installing, as has been done, over one hundred arc lights in front of stores to be used only Saturday nights, and from which the entire receipts will not pay the interest on the cost of such installations, we leave for the public to decide.

They vote taxes to pay $113.33 per lamp per year with 350 lights; therefore the total amount collected would be $39,665.50 per year.

The local company offered to furnish 350 lights for $31,500 per year. The taxpayers are furnishing $8,165.50 per year more than it would have cost if the local company had furnished the lights, and $18,665 per year more than they pay the contractors for the lights.

The excuse for this extra assessment being, that it is to be applied or set aside as a fund to be used in paying for the plant, when it amounts to a sufficient sum to do so. But instead of having a fund set aside after making these extra assessments upon the taxpayers, they in reality owe nearly $40,000 more to-day than they did when plant was started.

Even if no more extensions are made and the expense account not increased, it is not difficult to calculate how long it will take, with a difference of $989 per year, to accumulate $99,000, the amount the plant has already cost.

It will also be easy to decide the value of the plant when that time comes, that is, if the price per pound of scrap-iron remains the same as it sells for to-day.

The experts the Mayor employed told him the depreciation was 10 per cent. This means ten years as the life of the plant, and if they can keep the expense down so that it costs $989 per year less than cost with the private company, they will have $9890 towards the $99,000 depreciation at the end of ten years. Balance will be lost. Here we have the results of the wonderful plan proposed by the advocates of Municipal Ownership, by which a municipality can obtain something from nothing. The something being taxes assessed, and nothing, value of plant when turned over to the city.

SOUTH NORWALK, Conn.—It is claimed that the South Norwalk, Conn., plant is an illustration of what can be done under Municipal Ownership. The question is whether the reports sent out regarding this plant are sustained by the facts. There are many reasons for believing that they are made for the purpose of bolstering up the enterprise. February 28, 1893, the Lighting Commission reported that they had expended $22,452.97 of the $22.500 appropriated and had on hand $48.03. They claimed that they had not only installed the plant, but had operated it to that date with the money that the city had appropriated for its installation, and in addition they had on hand a stock of working materials and supplies sufficient for months. In this report they credit themselves with paying $,1040.50 for labor; on October 12, 1893, they made another report in which they state that the wages paid between October 13, 1892, and February 28, 1893, were $895, notwithstanding that they claimed in their first report that they had paid $1,040.50 for this

same period. In the second report is an item of $412.99 paid an electric company and charged to construction, but the inventory does not show any new apparatus installed.

Why was it necessary to expend $412.99 for reconstruction in the station after running only six months? To reduce operating expenses they deducted supplies on hand. If they had used supplies during the year in running the lights, what ever amount had been used during that time should be added to the other expenses, but the idea of deducting supplies on hand which had not been charged to that account, or used, in order to make the cost of lights appear less, is certainly an original one with this committee. In the report of February, 1893, they state that the lamps are 1,600 candle power, in one made October, 1893, they say they are 1,400 candle power, while the October, 1896 reports claim they are 1,200 candle power. Which of these reports is correct? In the 1896 report they claim that there was unexpended at the starting up of the plant $2,500, while the February, 1893, report says they only had $48.03 unexpended. If, as they claimed, they only expended $1,657.46 operating the plant, and had $2,500 on hand when they completed the installation, what was done with the balance of $842.54.

A test made by an expert of their boilers disclosed the fact that only 37 per cent of the heat of the coal was utilized, that is, they were losing 63 per cent of all the coal burned under their boilers. With their boilers giving an efficiency of only 37 per cent, they pretend that they can furnish lights at about half the price it costs private companies to produce the same light. The chairman of the Lighting Committee published a statement that the cost of lights under Municipal Ownership was 20¾ cents per night, while the private company charged for 81 800 candle power lamps, burned on moonlight schedule, 22 cents per night.

Also in report to the Mayor, statement was made that previous lighting of the city cost an average of $12.71 per night for 81 lamps of 800 candle power each. Here we have some more municipal mathematics, viz., multiplying 81 by 22 and have the product $12.71.

If burned as he says, 311 nights, at 22 cents per lamp, for 81 lights, the cost would be $5,542.02 per year. By reference to the City Clerk's report for that year we find that the total amount paid out for lights to the private company was $4,903.72, being a little over 19 cents per night if burned as he claimed. Why in this comparison did they suppress the fact that the private company furnished the 800 candle power lamps from dusk until 1 a. m. during 26 nights each month for four and one-half months of the year, and during the remaining seven and one-half months burned them from dusk until 5 in the morning every night, giving about 80,000 hours of service which they have not shown or credited to the private company in this comparison. If they had given the facts they would have shown by their own comparison that the price paid the private company was less than it cost the city to produce them in their own plant. This committee state that lamps only cost $58.96, including interest and depreciation. Upon an examination of their business we find

that the operating expenses were $4,382.82; interest @ 4 per cent, $900 depreciation @ 8 per cent, $1,800; insurance, $150; taxes, $150; total, $7,382.82, being $74.57 per lamp for a 1,200 candle power burning on moonlight schedule. In the above calculation the following items were not considered as part of the cost of lights: $488.96, which they added to their real estate after a year's use and without any increase in their property; $359.56 increase in value of tools in the same way; $414.24 for station sewer, which was charged to the sewer account of the city, instead of lighting account, and the expense of a cable under the river to replace one supposed to have been burned out and the cost of which was charged to extension of plant instead of repairs where it belonged. Neither does it show the $842.54 which has disappeared, if their statement in the 1896 report is correct or the costs and attorney's fees in the two suits of about $20,000, which the city have upon their hands over this electric light plant, and which even if they should win both are making and will continue to make thousands of dollars expense for the taxpayers. Charging the expenses up to legal, sewer, and other departments does not relieve the taxpayers. It simply gives the committee an opportunity for claiming that the lights are cheap.

As an illustration of how these political matters are worked, certain parties in South Norwalk who were anxious to install a plant for furnishing commercial lights, had a special city meeting called to vote to establish such a plant and issue bonds in payment. There were 82 voters present out of 1,430 voters on the voting list. The large taxpayers present opposed the scheme, but they secured 62 votes in favor of the plant and an issue of $20,000 worth of bonds for constructing the same. Here we have 62 voters out of 1,430 committing the city to a business enterprise involving thousands of dollars, and these 62 nearly all small taxpayers.

ST. CLAIR, Pa., has a plant costing $26,500 and uses 28 arc street lights. The superintendent writes that after deducting the total cash received from earnings of the plant the Borough Treasurer had to pay out $3,728.49 to meet the expenses caused by running 28 arc lights in the streets for one year. Costing on this statement $133.16 per lamp, not including anything for depreciation, taxes or insurance. He also says that he thinks this showing is better than it was the year before.

TOPEKA, Kan., plant cost $69,220.18; 258 arc 2,000 candle power, moonlight schedule until midnight. Operating expenses, $10,363.35; interest @ 6 per cent, (rate figured by the city) $4,153.21; depreciation @ 8 per cent, $5,492.87; taxes, $700; total, $20,709,43; being $80.26 per year, costing .549 per hour and furnishing 364 candle power per hour for one cent.

The operating expenses were $10,363.35 for the year. They divided this by the number of lamps used, 258, and say the quotient $40.08 is the cost to the taxpayers of an arc light.

Other cities are furnished this statement and told this is cost under Municipal Ownership, while in fact nothing is considered except the operating expenses. When the other items of expense which the taxpayers must meet are added it more than doubles the cost of lights.

The Mayor says: "We think we have got a bad bargain. We have found it a very expensive luxury. The ward politician must have his finger in the pie and the boodle councilman must be seen too so that in the end it is an expense rather than a saving to the city."

WAKEFIELD, Mass., as made to the state department. Plant cost $78,041.21, 145 arc 1,200 candle power, burned five hours per night 23 nights per month. Operating expenses, $11,863.27; interest @ 4 per cent, $3,121.64; depreciation @ 8 per cent, $6,243.28; taxes, $1,607; total, $22,835.19; less total income from commercial lights, $4,811.59; total, $18,023.60, being $124.30 per year for a 1,200 candle power lamp, burned five hours per night, costing .0851 per hour and furnishing 141 candle power per hour for one cent.

Under the laws of Massachusetts, a city is prohibited from conducting any enterprise of this kind at less than cost, and when the authorities found they could not produce the light without a loss, they applied to the proper state authority and obtained permission to levy a tax to make up the deficiency.

Newburyport, Mass., a neighboring city, contracts with a private company for lights at $75 per lamp per year.

WELLSTON, Ohio, plant cost $20,000, 61 arc 1,200 candle power, moonlight schedule. Operating expenses, $4,554.89; interest @ 4 per cent, $800; depreciation @ 8 per cent, $1,600; taxes, $200; insurance, $100; total, $7,254.89; less income from commercial and incandescent lights, $3,815.33; total, $3,439.56, being $61.42 per year, costing .028 per hour and furnishing 428 candle power per hour for one cent.

This plant is run in connection with the waterworks, and $600 of the superintendent's salary is charged to the water department, also wages of one engineer. Coal only costs 77 cents per ton.

WILMINGTON, Ohio.—An advocate of Municipal Ownership published a statement that the entire expenses of the plant were $3,200 per year, including interest and depreciation.

The plant cost $30.000. Their pay roll is $2,220 per year; interest @ 4 per cent, $1,20 ; and with depreciation at only 5 per cent, would be $1,500; fuel $1,500, making $6,420 per year and nothing for carbons, repairs, oil, waste or renewals.

WINTERSET, Iowa, plant cost $20,000, 15 arc 1,200 candle power, run until midnight. Operating expenses, $3,600; interest @ 4 per cent, $800; depreciation @ 8 per cent, $1,600; taxes, $200; total, $6,200; less income, $4,500; total, $1,700, being $113.33 per year for a 1,200 candle

power lamp only burned until midnight and costing .06 per hour and furnishing 200 candle power per hour for one cent.

WHEELING, W. Va., recently adopted this system. They installed a plant of 400 arc lights to burn all night, using steam power, coal costing $1 per ton. Before this municipal plant was established the local company offered to furnish any number of lights they might desire to use, to burn every night and all night, for $72.52 per lamp per year. Parties in Wheeling who had political aspirations made the claim that a plant could be installed for $26,000. This was afterwards raised to $40,000 and again advanced to $60,000, while the actual cost proved to be $125,000. The advocates of Municipal Ownership represented to the taxpayers that the total cost of running 400 arc lights if the city owned the plant would not exceed $14,000 per year, being $35 per lamp. They adopted the plan and bonded for $80,000 at 6 per cent interest, besides using $22,233 of the gas works funds (owned by the city) in installing the plant, the principal being payable $8,000 per year. Six dynamos were installed with five circuits, one dynamo to be kept as a spare machine. Soon after starting the armatures began to burn out; lamps were taken off in hopes of relieving the dynamos, thereby stopping the heavy loss, but it did not answer the purpose. They were compelled to buy another dynamo and cut down the number of lamps on each circuit, making six instead of five.

Owing to their heavy indebtedness and with the city's finances so low they could not pay the interest or the $8,000 principal on bonds which were due, by agreement the bond holders extended the payment of interest and bonds another year.

The fallacy of the claim made by the advocates of Municipal Ownership that the entire cost of running the plant for a year would not exceed $14,000 is shown by their actual expenses for a year. On the fourth page of the city clerk's report he says the cost of maintaining the lights one year was $30,142.42. This is the cost after a practical experience, and is more than double the amount that taxpayers were told would be the cost when they were induced to vote for purchasing the plant, and does not include interest, depreciation, taxes, insurance or water rent.

The taxpayers have learned the truth regarding Municipal Ownership, and there is trouble. This is one illustration of results produced by adopting the unreliable reports and figures used by the advocates of Municipal Ownership. Experience is a very good teacher, but sometimes rather expensive, and when the authorities found that it was costing them $112.73 per lamp per year for the same light that the local company offered to furnish for $72.52, they no doubt would have cheerfully dumped the parties whose advice they had followed into one of their huge political machines to see if it would increase the number of amperes required and decrease the steady loss.

WATERVLIET, N. Y., plant cost $34,000, 125 arc 2,000 candle power. Operating expenses, $8,024.15; interest @ 4 per cent, $1,360; depreciation @ 8 per cent, $2,420; taxes, $150; insurance, $1'0; total, $12,354.15, being $98.83 per year, costing 2.63 per hour and furnishing 760 candle power per hour for one cent.

They run all night and every night, and claim they only pay one engineer. Therefore part of the year he must work from 16 to 18 hours per day.

The plant is reported in a very dilapidated and unsafe condition, so much so, that it is considered dangerous for the employes.

WEATHERLY, Pa., moonlight schedule until 10 P. M., using steam power. The plant cost $20,000. They burned the lights 1,000 hours and after deducting all income from rented lights, the cost was 11 cents per hour, furnishing 181 candle power per hour for one cent.

YIPSILANTI, Mich., 20 nights per month on moonlight schedule, using water power. The plant cost $26,000. They burned the lights 1,460 hours at a cost of .0664 per hour, furnishing 298 candle power per hour for one cent. The engineer who constructed the plant writes that he considers 10 per cent depreciation very low.

BAY CITY, Mich., plant cost $36,305, 181 arc 2,000 candle power. Operating expenses, $8,900.31; interest @ 5 per cent, $1,815.25; depreciation @ 8 per cent, $2,904.40; taxes, $300; insurance, $150; total, $14,069.96. Being $77.73 per lamp per year, costing .0354 per hour and furnishing 564 candle power per hour for one cent.

It is claimed by the advocates of Municipal Ownership that there is no depreciation, but the superintendent in his report to the commission stated as follows: "It will be absolutely necessary to rebuild arches. This cannot be done without shutting down both boilers, which means from eight days to two weeks that the city will be without lights. We also ought to have a new engine." When this statement was made, the plant had been operated only six years.

Jackson, Mich., a city in the same state, contracts with a private company, and lights only cost .0208 per hour, only about two-thirds of what it cost Bay City to produce their own lights.

The following editorial from the Grand Rapids Herald is significant: "The Herald this morning desires especially to call the attention of its readers to that portion of the official proceedings of the Common Council, which publishes in full the report of the special committee recently appointed by that body to ascertain the cost of maintenance of municipal lighting plants. The report is worthy of the careful study of every taxpayer and of every citizen interested in the welfare of this municipality.

"The committee visited Bay City, but the lighting plant in that town was evidently not at all satisfactory, as no figures regarding it are given."

EASTON, Pa., has 108 arc lights of 2,000 candle power, using steam power, the plant costing $40,000. They burned the lights 3,219 hours, costing .0445 per hour, furnishing 449 candle power for one cent.

A citizen of Easton in writing to the Free Press of that city, says:

"Your editorial in last night's issue concerning the incompetency of the officials in charge of the water and light department does not go far enough in its criticism of a department, which at the present time is receiving merited abuse from all classes of citizens.

"At the time the extra appropriation of $16,000 was asked for, the plea was made that the improvement would admit of increasing the number of lights on the streets, and not only improve the efficiency of the service, but reduce the cost of operating expenses so the cost per lamp would be less than it was before. The new machinery, according to the account published, has been in operation for some time, but the service rendered by the department is poorer than at any previous time. * * Even the cost would not be open to criticism if it was the prevailing price, but our neighbor city, South Easton, is receiving from a private company a light and service far more efficient than we have at a cost of less than $100 per lamp per year.

"The Mayor in his last message says: 'In Easton the cost is claimed not to be over $87 per lamp, but both the city treasurer and controller, who are familiar with the subject, claim that the cost is far in excess of those figures, and may reach the highest figures of any city which owns its own plant.'"

The **Easton Express** says: "If our street lighting was done economically and efficiently, there would be no cause for criticism; but the fact is, the cost is excessive and the service abominable.

"The amount appropriated for lighting the streets for the present year is $10,500, a small portion of this pays for water and gas; but in addition to the amount appropriated, the city pays annually $1,600 interest on the cost of the plant, making a total of $12,100. This amount does not provide for any depreciation from wear of machinery.

"The same number of lights as now used can be had of a private company for $8,000, or a saving to the city of $4,000 a year, even deducting the interest, or not taking the same into account, there would still be a saving of $2,500 per year. * * I think to the average taxpayer, the amount which could be saved represents a large sum of money, and could be used to an advantage by the city.

"It was claimed at the time when the large additional appropriation was expended in enlarging the station, that with the addition of more lights, the cost would be decreased, and the efficiency secured beyond doubt; but the facts do not bear out the assertion. When the appropriations were made for the present year it was stated that on account of the additional lights the department would need $11,500; this amount was reduced $500, and still further reduced $500 by the finance commit-

tee ; probably it will be necessary to charge the difference, in order to make up the deficiency at the end of the year, to permanent improvement.

"If a private company can do the lighting at a saving of $4,000 to the city and make a profit on same, what ought to be the cost of the same lighting done by the municipal plant where everything is figured at cost?

"As to efficiency, admitting that at times lights furnished by priva'e companies do not burn, there is this to their credit, that all such lights are deducted from the monthly bills, so that the city pays for only lights in service.

"No better comparison can be had between municipal lighting and that done by private companies than shown in this vicinity. The neighboring cities buy their lights; and it has been noticed and severely commented upon that their lights are burning from a half to one hour before the lights in our city. Not only are the lights started earlier, but burn longer in the morning. The writer had occasion lately to be out on the street early in the morning and, out of eight lamps passed on the way, only two were burning. I have been informed that this is the rule and not the exception."

KALAMAZOO, Mich.—An advocate of Municipal Ownership published a statement showing that the cost of lights in Kalamazoo under city management was fabulously low. Only a few weeks before that publication the city authorities employed an expert to examine the plant and see what could be done.

This expert stated "that the poles and wires were a menace to life and property; that there were not enough good lamps in the city to decently and properly light one street, and that the plant itself had gone to rack and ruin and needed entire renewing." This is another illustration of the folly of Municipal Ownership and the result of politics in a business enterprise which requires expert knowledge and experience.

The remarkably low alleged cost was obtained without renewing the machinery or counting anything for depreciation, interest or any of the other items that should be considered in making an estimate of the cost to the taxpayers. Kalamazoo is an unfortunate model for the advocates of Municipal Ownership.

TITUSVILLE, Pa., was induced by the fabulous statements of the remarkable success of municipalities with electric lights to invest $10,000 of the taxpayers' money in this wonderful business. The usual result, citizens disgusted with the way lights are run, when burned at all, and the heavy expense of this new political machine. The controller's report shows that the cost is $83.17 per lamp for miserable lights burned only part of the time. The local electric light company have offered to furnish first-class lights for less money than the city can

produce them with their own plant. The important question now under consideration by the city is how they can unload their electric elephant.

A prominent citizen said the system was very unsatisfactory. It is out of order a good deal. We have not had lights for the past two weeks.

STATE OF VERMONT,)

CITY AND COUNTY OF RUTLAND,) I hereby certify that I have compared the statements and amounts given as expenses of the various municipal plants shown in "Municipal Ownership vs. Private Corporations," with those furnished by the officials of the various cities reported, and find that they are the same as officially reported by the city authorities in each case.

I. H. FRANCISCO,
Notary Public.

EDITORIAL OPINIONS.

The **Atlanta, Ga., Journal** says: "The Journal prints this afternoon a reply to Judge Hillyer's recent speech on Municipal Ownership, particularly the question of public lighting, from M. J. Francisco, one of the country's best known electrical experts. Mr. Francisco's figures are accepted in the electrical world as standard, and his communication should be read by all who are seeking information on a question which is of interest to every taxpayer."

The **Tribune, Minneapolis,** says: "The city of Philadelphia is an older city than Minneapolis, and has owned its own plant long enough to allow a neglected depreciation account to tell its own story in such a forcible manner as to leave no room for doubt that something has happened. The city of Minneapolis is traveling along the same road, and it is only a question of time when it will reach the same end. The taxpayers of Philadelphia have always supposed that consumers of gas were paying all the expenses of the department, and also a profit which was reducing the general tax levy. They have discovered at last that the consumers of gas have only paid about sixty per cent of the expense, and the remaining forty per cent, aggregating nearly $2,000,000 annually, they have paid in general taxes. The same condition of facts exists in Minneapolis. The consumers of water are not paying to exceed one-half of the expense of the department, and the taxable property of the city is paying the other half. This is not only unbusiness-like, but absolutely dishonest in that it is forcing the non-consumer to help pay the water-bills of the consumer. And yet we are advised that the water-works is making money. The result is a perfectly legitimate sequence of placing the management of the property in the hands of men who would not know a business proposition if they saw it."

The **Times Herald**, Chicago, says: "Carefully gathered statistics show that there is not a city in the United States owning its own lighting plant that does not pay a great deal more than it would if it hired its light from a company, the specious reports made by mayors and committees to the contrary notwithstanding. If any person is in doubt as to this statement we refer him to a pamphlet by M. J. Francisco of Rutland, Vt. Mr. Francisco is an eminent engineer, and has taken great pains to investigate the facts.

The **Western Electrician**, says of the Mayor of Des Moines: "Their position would be much stronger had the leaders at Columbus been men of experience and established reputation. Mayor MacVickar of Des Moines, who posed as the special champion of Municipal Ownership throughout the meeting, and who was chosen president of the organization, spoke with an air of authority upon this subject, in spite of the fact that there is no municipal plant in the city of Des Moines, and that there is not likely to be one there for some time. Yet Mayor MacVickar will henceforth be quoted as an authority upon this subject by advocates of Municipal Ownership, although his address merely repeated the claims of those who were interested in securing the establishment of a city plant in his bailiwick. Under the circumstances, no business man would be guided in making an investment or determining the policy of any enterprise he was directing, by views of one so inexperienced.

"Public sentiment is frequently misrepresented by officeholders, who labor under the impression that they form and direct public opinion, whereas they are merely the creatures of circumstance. Too much importance should not be attached, therefore, to the expressions of local politicians whether they are clothed in official authority or merely aspire to place.

"It is admitted even by those who favor the new idea that many of its most earnest advocates are actuated entirely by selfish motives. They may be influenced by the desire for political advantage or financial gain, in any event the taxpayer's interests are lost sight of, when such rapacious spoilsmen advocate Municipal Ownership. Honest men hesitate about joining in such a movement."

The **Rochester, N. Y., Post-Express**, says: "Not a city in the United States can be named where the business intrusted to it is managed with anything like the skill and economy of a successful private business. It may be said, as is, in fact, often said, that when gas works and street cars are in the hands of private capitalists, the public is mercilessly robbed to enrich them. Even if the charge be true, is it robbed to the extent that it is under political management? Does it suffer in like degree from the evils inseparable from politics?"

The **Washington Star**, says: "Not only do the employes of a government—of a city, state, or nation—do less work, as a rule, than persons in corporation or private employment, but there is a large additional

expenditure for superintendence and clerical work. Foremen and assistant foremen are appointed merely to furnish good places for friends. Chief clerks, assistant chiefs and timekeepers in large numbers are provided with salaries. It often happens that the pay roll calls for more money for these positions than for all the real workers. There are few governments in the United States, from that of the nation down through the states to the small cities, that do not pile up expenses in this way. It is true that many excellent citizens are helped along through life by this generous management of public affairs, but that fact is, nevertheless, a strong argument against Municipal Ownership of public works."

The **New York Evening Post**, says: "The confessed break-down of the municipal gas system in Philadelphia is a severe blow to the advocates of Municipal Ownership. A legislative investigation has finally laid the entire system so bare and defenseless that the business sentiment of the city is now strong for turning the whole thing over to private companies. It is amusing to read that the only argument made against this course was that of 'calling attention to the rate at which gas is furnished by municipalities in England.' The argument really is, a capable and honest government can run city gas works; therefore an incompetent and corrupt government can do it."

The **Electrical World**, says: "The experience which has been gained in the municipal control of water and gas works and of the few electric light plants which have thus been owned should be sufficient to deter any town or city that contemplates the dangerous experiment of operating car lines. While from many points of view the advocates of Municipal Ownership are able to present strong arguments and to make out a good case for their position, the final argument of common sense does not lie with them. It is likely that human nature would have to be reconstructed before really successful municipal operation of large semi-public works of this character could be had in this country."

The **New York Sun**, says: "The first attempt ever made to construct a trolley road at county expense will be made to-night at a public meeting to be held at the county court house, when the plans prepared by former City Attorney Frank Bergen will be acted upon, and the details arranged by a committee of citizens appointed last September will be discussed. The plans contemplate at the start an expenditure of $400,000, the county to be bonded to that amount, provided favorable legislation can be secured.

Now with towns and cities in all parts of the country crying out against Municipal Ownership of electric lighting plants on the ground that they cannot be made to pay, and that the cities or towns in which they are located are getting deeper and deeper into debt, we fail to see how the officials who are engineering the Elizabeth Plainfield trolley scheme propose to make both ends meet. Possibly the Board of Freeholders of Union County flatter themselves that it is less difficult to make

a trolley road pay than an electric lighting plant or any other similar enterprise under municipal control. If they are laboring under any such delusion, it will be a kindness on some one's part to set them right. The arguments against Municipal or County Ownership have been stated time and time and again, and it is only necessary to read some of the annual reports issued by various communities owning and operating electric lighting plants to fully convince one of the folly of such an undertaking with our present systems of local government. Enterprises or industries such as telephone and telegraph systems, electric lighting plants and street railways, flourish best under purely economical conditions that are unvariably absent from municipal or government management. Even in Europe where city officials, if competent, usually hold their positions for years, railway service, electric lighting and other similar industries have almost invariably proven unsatisfactory when under municipal or governmental control. If this has been the case in Europe, where politics plays but a comparatively small part in such matters, what can we expect in this country where men frequently go into politics for the sole purpose of enriching themselves? Let a municipality exert all its energy in keeping the roads and streets in good condition and the sewers clean, and leave electrical projects to outside parties who are not office holders."

The **Journal**, Ithica, says: "Cities are liable to suffer from the proverbial incompetence, indifference, or even dishonesty, of employes having no personal interest in securing highest economy in working for their fellow citizens; which liability may be fairly asserted to be largely due to the indifference of the average citizen to the best interests of his own city and of his own fellow citizens. The difficulty with the city owned plant is evidently not that mainly of securing low cost of production of light, however, but that of insuring skillful and conscientious operation and proper maintenance of its plant and of economical conditions of operation. Fair private profits are often more than balanced, in the case of public operation, by the risks and the losses on these scores."

The **Evening Post** of San Francisco, says: "Nothing is more certain than that up to the present time, municipal government all over the United States is a failure. The nation is well and economically conducted. The states are in most cases managed by persons devoted to the public interest and who render adequate service for the salaries that are paid them. But in cities it is one unending failure from Maine to California. There is not a large town in the country that is not infested with bosses.

Theorists disagree as to the cause of municipal government, but there is no doubt that a large part of the misgovernment is due to the spoils system. If the mayors of all the cities in the country can get together once a year and exchange ideas it may result in much good to the country, but it is doubtful whether any permanent reform will be effected until there is a change of system. So long as the spoils of American cities

continue to be the prize of municipal campaigns it is doubtful whether anything the 'League of American Municipalities,' or anybody else, can do will produce good government in cities.

The political bosses can only be dislodged by taking from them as far as possible the patronage. If the people of the entire country represented in the league could agree on some specific policy of reform, the efforts of that organization might produce some practical result."

Times, Brockton, Mass., says: "Municipal Ownership is undoubtedly a desirable thing in some respects; but the introduction of the system here at any time within the immediate future is out of the question; therefore agitation of the matter appears to be decidedly premature at the present time. Even were it possible of accomplishment, the expediency of the system is by no means clear, while it is not without objections of a serious character. No doubt there is a glamour about the idea of a city controlling its own public enterprises, which is so attractive as to blind the enthusiast to its less practicable features; but the fact remains, nevertheless, that there are two sides to this, as to every other question, and it will pay to go slow in the matter of accepting all that is claimed in its behalf and examine the other side before coming to a too sweeping conclusion.

"The time when this city will be prepared to branch out into the broad domain of Municipal Ownership, controlling street railway lines, etc., is as yet a long way off, even granting that such a project is within the realm of probability. It should also be remembered that we owe something to the enterprise of those who have given us our convenient means of communication, and they have rights which we are bound legally and morally to respect. In a word, this talk of Municipal Ownership may be diverting and entertaining in the abstract, but any attempt at its concrete embodiment is somewhat premature, to say the least."

The **Toronto Globe** says: "If the City Council sees fit to establish an electric plant to light and furnish power to the City Hall and other municipal buildings, existing private corporations have neither claim to compensation nor cause for complaint. That is purely a question of internal management of civic affairs. But were the city to enter into competition with existing corporations in selling electric energy to the people, a different question would arise. The whole people would be going into competition with a few of themselves. Existing electric light companies are taxpayers and a part of their money contributed to the municipality would be used to establish competition with themselves. They would have the right to demand that the city start dry goods stores, furniture factories and newspapers. Whatever may be said of an existing company's rights against other competitors, it certainly has rights against civic competition. On economic grounds it is evident that the purchase of the plant of an existing company would be more profitable,

both to the company and the city, than the duplication of wire circuits for competitive services. That would be as foolish as the building of two dividing fences by quarrelsome neighbors."

The Electrical Review says: "If these scientific enthusiasts could be persuaded to band themselves together and carry out their revolutionary ideas on some Pacific island, they would not only receive convincing proof of the impracticability of their political notions, but would spare the United States much annoyance. It has been repeatedly and convincingly demonstrated that private competition can be relied upon to do better and cheaper work than municipal management. One watches with a careful eye every step of the management of its concerns; the other is invariably accompanied in the long run by mismanagement and jobbery. What is everybody's business becomes nobody's business, and the poor taxpayer always suffers. There is enough corruption, forsooth, in potitical affairs in the present scope of governmental functions, without taking dangerous chances on an expansion of the field of operation. The less the state interferes with private affairs the better for the public."

The London Times, condemning government control, says: "It can hardly be doubted but that, if the telegraphic wires of the country were in the hands of private companies and were administered by private enterprise, instead of being a government monopoly, the public would gain largely in rapidity, cheapness and extension of telegraphic communication. It appears more doubtful whether the monopoly given by Parliament, and the purchase by the government of the telegraph lines in the United Kingdom, have not proved to be errors, and whether the time will not shortly arrive when the administration of telegraphs should be taken out of the hands of the government and again entrusted to private enterprises."

Evening Journal, Jersey City, says: "Gas and electricity cannot be made absolute monopolies because of the possibility of substitution. An individual may use oil or generate his own gas or electricity, but wells can be closed, telephones prohibited and street cars limited by ordinance.

"The question that is being agitated by socialists, populists, demagogues and others is, should the cities own the plants which produce these necessities or conveniences, or should it grant franchises to individuals to supply them?

"The water supply of Jersey City, under political management, instead of showing an annual profit, as it would under private management, shows an annual deficit. The water is supplied at a central point by a private company. The distribution is through public mains, yet the administration of the water department costs more than the water. Similar results would be shown by each of the common services required by a city under existing conditions.

"If the city owned the gas, electric light and power and telephone plants, each of these would produce another deficit, and the service would decline in quantity and quality.

"Municipal Ownership under existing laws is not possible under existing circumstances."

The **Boston Journal** says: "Whoever has given close attention to the processes of municipal politics and administration, must shrink from adding to the opportunities and inducements to mismanagement and personal aggrandizement at the public cost. The legitimate and necessary functions of city government, involving, as they must, the carrying forward of large enterprises and the expenditure of vast sums of money in constructing and maintaining public works and buildings, and in providing for the public security and welfare, are quite sufficient to be exercised by city governments. Any unnecessary extension of these activities into fields now properly cultivated by private enterprise is to be regarded with apprehension.

"Under municipal control, the present experienced employes of these companies would be displaced in favor of political 'workers.' The henchmen of the ward boss are comparatively harmless digging in a trench, but it isn't pleasant to imagine the results if they should be intrusted with the responsibility of running a big gas plant, or let loose among a lot of wires surcharged with electricity. There certainly would be no gain in point of safety if the powerful agencies employed in the lighting of our cities should be turned over to the tender mercies of the small politicians, and experience in most other municipal departments suggests that there would be no real gain in cheapness."

The **New York Sun** says: "Why may it not proceed to take and run the railroads and the express companies, to work the mines and the oil wells, and then go on to the management of all manufactories, and finally to the control and monopoly of all business, to the entire destruction of private enterprise? Then everybody who worked would be in the government employ, prices would be regulated by government, individual initiative would be gone, and with it would go the liberty for which mankind has ceaselessly struggled through so many centuries. The dream of the socialists would have actually come to pass, and John Most and his gang of anarchists would have the opportunity for social destruction, for which they are so impatiently waiting. The Roman Empire made about the same experiment in the fourth century, with the consequence that not only the empire, but also society itself, went utterly to pieces.

"The Municipal Ownership of gas plants is a socialistic experiment which has attained some success in one or two small foreign cities, under totally different circumstances from those prevailing here. Wherever attempted in this country it has resulted in poor gas, jobbery and scandal. Every intelligent Philadelphian admits that the Municipal Ownership of gas in his city has been a public misfortune."

The **Cincinnati Times-Star** says: "We have had a taste of government ownership right here in Cincinnati for several weeks, and the flavor has not yet gone from our mouths. Our waterworks have been run by an arm of the government, and have had so much politics mixed in them that screws have twisted themselves from bolts, and steel castings have warped until the horrors of a water famine for several days stared the people of this city in the face.

The **Gas Light Journal** says: "Their short-sighted meanness to their salaried officers, influence of ward politicians and newspapers to cut down salaries to the standard of weekly wage-earners, its tendency to keep educated and skilled men out of the profession, with the result of bad management and great ultimate loss.

"Headstrong perversity of committee men who think they know everything, and can dispense with professional advice to a greater extent that the directors of a gas company ever pretend to do. Their habit of going on tours of inspection of gas works in distant towns, often without their engineer, without having any knowledge of the subject, and of misunderstanding and misrepresenting what is shown or told them confidentially, etc."

The **Harper's Weekly** says: "Dr. John Billings, of the army, who is well known as one of the most eminent authorities upon sanitary science, in a recent paper read in Philadelphia to the Academy of Political and Social Science, alludes to ex-President Andrew D. White's remark that, 'With a few exceptions the city governments in the United States are the worst in Christendom, the most expensive and the most corrupt.' Dr. Billings says that is a strong statement, but it is true."

The **Courier**, San Bernardo, Cal., says: "The city, in our opinion, can not and will not run electric lighting as economically as would a corporation of business men. Every city in the Union that has experimented with furnishing its own electric lighting has made a flat failure of it from an economical standpoint. A municipality cannot, and in fact to corroborate our assertion, never is, as careful or economical as a private business association. Politics will interfere. The management, the officials, the employes of the city's electric lighting works would, as a rule, be working petty politicians. They would rarely be faithful. Ward workers are never faithful, except to their bosses, who can give them a grab at the spoils. Let the city buy a plant and furnish its own electric lighting, and it will be a heavy loser financially. One party or another, one interest or another successful at the polls, one set of trustees or another, will make change after change at the heavy expense of the taxpayers."

The **Volksblatt**, Cincinnati, says: "Municipal Ownership of electric plants. If we recur to this subject, it is done with a view to save

the city from an impending danger as far as it is in our power to avert it. The danger is great, because Municipal Ownership has, at first view, much to commend it to the uninitiated.

"But if the saying of the old Roman, 'If two do the same thing, it is not the same thing,' is anywhere applicable, it is of particular force in this instance. Private service and public service are as different from each other as day and night, and it should not be difficult to grasp the distinction. A private corporation is compelled to husband its resources or it will prove a failure. It will therefore not invest more capital or employ more people than is absolutely necessary, and will get full value for each dollar it pays out in wages.

"It is quite different with a public corporation. The citizens furnish capital in the shape of taxes, and if this money is wasted they are simply bled for more money. In place of an expert, the management is confided to a politician, whose ignorance alone entails serious loss and damage. His employers are of the same stripe, gutter politicians, ignorant and careless, as they are appointed more with a view to their political influence than their ability; and to crown the misery we have a change of the *personnel* every few years. If these incompetent people have really acquired some skill and learning, a political revolution sets in, the dominant power party is hurled from power and a new party is enthroned. Its very first effort is to dismiss all employes and to make room for the heelers of its own party. Every reader will at once recognize that we merely state facts which have been experienced in our city."

The **Dispatch**, Columbus, Ohio, says: "It would not be good policy, in the judgment of any well-informed, practical business man, for the city to erect an electric light plant. The best statistics and opinions we have on the subject, show that the management of such things cost more under the auspices of a city government than by a private corporation. These statistics, however, are from the standpoint of the managers of private corporations. Yet we have full faith in them because of the well-established fact that the cost of managing work under municipal corporations is almost invariably greater than it is under the supervision of private corporations. This is largely due to the fact that in municipal corporations men are appointed on account of political rather than strictly business consideration."

The **Hartford Times** says: "The work would be no better done than it is now, and probably not so well done as it is and will be by private enterprise. We might as well say that the government should take possession of all the horse shoeing work in the country, cut down the prices, and put enough men to work to shoe horses rapidly so that no one would be required to wait when the ice comes, and the horses need calking; and then take possession of the boot and shoe and tailoring business and run the factories. It would be one short step from one thing to another."

The **Detroit Evening News** says: "This is a government of the people, for the people and by the people. It has no place in the field of speculation, transportation or commerce. It has no right to expend money either for the convenience or advantage of classes that are so small, when compared with the whole body of citizens, that they do not numerically warrant the expenditure for their advantage. It has no right to engage in business that is outside the sphere of legitimate governmental activity."

The **North American Review** says: "The constant element in municipal affairs is the unremitting desire of the politician to gather masses of votes, and of the contractors to place men who furnish them to prey upon the city treasury. The people who do not pay are always ready to create debts against the people who must pay.

"'They who do not pay the piper are ever ready to dance to his music.'"

The **Newark Advertiser** says: "It is a part of the plan by which it is proposed that the government should own and operate all public enterprises of its kind, or any other.

"In fact it is only necessary to carry the argument a little farther and make the government paternal in every respect, giving it the right to operate all business enterprises, and even to feed the people."

The **New York Financial** says: "And what would be the far-reaching result? All kinds of enterprise would receive a blow which would fall the more heavily by as much as its exact force could not be measured. Who, then, would dare to put money into a railroad, or a steamboat line, or an express business, or even into a manufactory? There would be a constant menace to all private industry."

The **Nashville American** says: "According to this idea the government has a perfect right to make soap or to manufacture ready-made clothing or peanut candy, if they can do it cheaper than private individuals, and indeed, there is no stopping-place when once the rule is applied. Of course, such an idea as this could not for an instant be entertained by any one but the most pronounced advocate of centralization, and centralization in its worst form."

The **Newburyport (Mass.) Herald** says: "On the other hand the State socialists, or nationalists, demand that the government shall take everything into its hands, not only the telegraphs, but the railroads, manufactures, mining, lighting the houses, the water supply, and the providing of work for everyone and a living for all. They point to the socialistic features in support of their position, and as showing the inconsistency of those who hold to the democratic theory. But the trouble with human affairs is that they will not square with logic. We can tell exactly what they ought to be, but they will never come out so, human nature is either so depraved or so perverse."

The Time , Lowell, Mass., says: "If the cities in this commonwealth should ever get control of gas and electric lighting, it is to be hoped they will manage the general illuminating department better than they have some other departments. If they do not, we shall be in semi-darkness half the time. Why not let well enough alone?"

The Boston Daily Traveller says: "We are not aware of any necessity why cities and towns should undertake this form of business any more than others which have always been conducted by private enterprises, and we are not called upon to consider what extraordinary power the commonwealth may exercise or may authorize cities and towns to exercise in extraordinary exigencies for the safety of the state or the welfare of the inhabitants. If there be any advantage to the inhabitants in buying and selling coal and wood for fuel at the risk of the community on a large scale, and on what has been called the co-operative plan, we are of the opinion that the constitution does not contemplate this as one of the ends for which the government was established, or as a public service for which cities and towns may be authorized to tax their inhabitants."

The Weekly Sentinel, La Mars, Iowa, says: "Many of the people argue that it would be cheaper to make a close and careful bargain with some company. They say that it is better to keep such things out of politics. That a man whose business and living depend upon the successful management of the works would be more likely to run them well than a committee of the City Council, that would be changed every election; that the owner would devote his whole time to the matter for years, and that officials could only give it a part of their attention.

"They also argue that public work usually costs more than private work, just as graders working under contract on a railroad move more dirt than men who work by the day to work out their poll tax on city streets or country roads."

The Journal, Indianapolis, Ind., says: "The theory of municipal socialism assumes that all public officials are honest and efficient, and where this is the case it works out well, but, as a matter of fact, they usually are not. The city, in operating large public concerns, always pays liberal salaries and wages, but does not get, as a rule, as efficient service as private concerns. There is a continual menace from political influence, where there is a large patronage to distribute, that is likely at any time to cripple the efficiency of the service. Again, if we were to put in an electric plant what assurace have we that the next board would not want to tear it out and put in a better one? Electrical inventions become ancient history in three or four years nowadays. We might put in an expensive plant and find, by the time that we had it paid for, that we had a 'back number' on our hands."

The American Commonwealth says: "Whatever advantage such annexation may have brought, it so increased the opportunities for mis-

management and plunder that it has enabled Mr. Bryce to assert, with all the more confidence: 'There is no denying that the government of cities is the one conspicuous failure of the United States.'"

The **Political Science Quarterly** says: "Those who advocate state management in the United States forget to think of the havoc that would be created by the simple political influence of our law makers. Were the state to run the railways under our political system, the claims upon our legislators for spoils would be increased a thousand fold."

The **Bulletin**, Providence, R. I., says: "To add the manufacture of gas and the generation of electricity to duties already beyond the grasp of our city officials would merely call more attention to their incapacity. The present test of employing men who vote the straight ticket of either party is a very modest one, hardly requiring the intelligence shown by a school girl in selecting a new gown, yet to have so voted for a number of years constitutes a claim on the recognition of the party which is considered imperious. Perhaps it is an instinctive conception of its own limitations that has hitherto encouraged the conservatism of all Rhode Island communities. The camel has a long journey before it, and it is wise to adjust the load to the back which has to bear it; if our neighbors are experimenting with their caravans why not rest awhile in order that we may take advantage of their blunders? Those also serve who only stand and wait."

The **Cincinnati Commercial Gazette** says: "Whether the chimerical idea that it is the province of government to do everything for everybody has been promoted by a suppositious vision of an impossible political and social condition of the world 110 years from now, or whether this idea has received an impetus from some other quarter, there certainly seems to be a more pronounced effort than ever before to impose additional duties upon the government, notwithstanding the fact that all experience proves that government interference with private enterprise is prejudical to the interests of the public. The proposition appears absurd when carried out to the legitimate result."

The **Electrical Doings** says: "We are all familiar with the devious ways of municipal corporation financiers by which interest or original outlay is charged to one account, superintendence to another, and cost of operation to another. Nothing is harder than to disentangle the various items of a city's expenses and to group them under headings which will give a fair comparison with the work done by private corporations in the same field. Besides, none of these cities has been long enough in the business of electric lighting to be able accurately to estimate the cost of renewals and repairs.

"The universal experience in this country is that municipalities cannot compete successfuly with private contractors in any branch of work.

"If the private companies were once made to understand that those in charge of the affairs of cities were ready to make as fair a bargain as a private consumer, and knew enough not to pay any more than a private consumer, the rest would be easy. As a large consumer, whose credit was first class, each city would be sure to get a better bargain from a private electric light company than a private consumer could. All that is wanting is the business ability and the honesty on the part of the municipal officers, and if these qualities are not forthcoming in making contracts how can we expect to find them in manufacturing electric light as a branch of municipal work?"

NOTICES FROM PAPERS IN UNITED STATES AND ENGLAND.

Prominent papers in the United States, in London, England, and Edinburgh, Scotland, have reviewed the previous editions of this work. The following editorial shows the trend of the press upon this subject:

The New York Evening Post. "A pamphlet has been published by Mr. M. J. Francisco of Rutland, Vt., in which Municipal Ownership statistics are subjected to a thorough sifting and in which returns are presented from all the towns and municipalities in the United States that have gone into the business of supplying gas or electric lighting. The result is to discredit seriously the facts and figures put forth by the nationalists, and to reinforce, from actual experience, the conviction, which is fortunately widespread, that the conditions of town and city government in this country are not such as to invite this extension of public functions. Mr. Francisco holds no brief for any theory of society or of government, but simply submits the whole question, in a cold-blooded way, to the test of bookkeeping and dollars and cents. He makes it clear, to begin with, that the reports of cost and efficiency and profit made by municipal officers are so loose and conflicting that it is dangerous to put any trust in them. As he well says: 'Officials see no necessity of inaugurating strict business methods when a plausable statement that there is a reduction satisfies the public.' One table given by Mr. Francisco is conclusive on this point. Committees from Mobile, Scranton, Milwaukee and Stubenville were investigating the question of electric lighting by municipal control, and made separate applications to the officials of Little Rock, Chicago, Ypsilanti and Aurora, to find out what they were actually paying. The replies were so discrepant as to show that they were mostly guesswork. To one committee, Little Rock reported that the annual cost per light was $47, to another $81. From Chicago, one report set forth the cost as $54.75, another $83. So with the other cities, and it is no wonder that the committees of inquiry recommended that contracts be made with private companies.

"Moreover, in municipal bookkeeping no account is taken of interest on the investment, or of repairs and renewals, or of damages paid out

on account of accidents, or of taxes which would have been paid to the municipality by a private corporation doing the business. In this business-like way, Mr. Francisco takes up case after case, and his brochure, as a whole, is one which Mr. Bellamy cannot afford to lose any time in studying and refuting, if he is able to refute it. One of the most deadly tables is that in which the cost of public lighting under Municipal Ownership in twenty-nine towns in different states is compared with the cost in twenty-nine other adjacent towns, where the private-contract system is in force, with the result of showing that in nearly every case the cost is lower under the latter conditions, and also that 'the candle power for one cent furnished by the private company is more than that produced by the municipal plant.' Not the least-telling part of the whole pamphlet is the exposure of the way the public-lighting service becomes only a 'new political machine,' always tending to parallel the experience of Philadelphia, where, as the Committee of One Hundred ascertained, the 'gas trustees' made off with $3,500,000 in the course of six years."

The Journal of London, Eng., in an article entitled, "An American on British Municipal Government," says:

"In the April number of the *American Engineering Magazine*, which is generally conceded to be a publication of considerable merit, there appears an article by Mr. M. J. Francisco on 'Municipal Ownership of Public Corporations,' written from an American standpoint, based upon American examples, and addressed primarily to an American public.

"It concludes with the declaration that 'the time for municipalities to own and conduct commercial industries has not arrived, and will not arrive until men are born into a world where politicians and aldermen protect taxpayers and refuse 'boodle'; where children are removed from parental influence and nurtured by the State, as advocated by Plato; where employes with no interest in the business, except to aid the political bosses and draw their salaries, can conduct the business more economically and successfully than men who have, perhaps, every dollar of their fortunes depending upon its success; when, in fact, the millenium arrives and the whole human family is transferred to some eternal city lying beyond the misty shore of time. Until that time comes, let all cities confine their business to regulating and governing, leaving commercial industries, with their hazards and losses, to individuals and private corporations.'

"It may be assumed that these observations are justified by the circumstances or they would have hardly been permitted to stand, as they do, for a summing up against the contemporary movement in the United States, the existence of which is admitted in the beginning of the article, 'demanding that governments (State, national and municipal) shall own and conduct all large commercial enterprises.'

"By way of comment upon Mr. Francisco's views of the functions and characteristics of the governing bodies of the United States, we have the

book we are about to notice wherein Mr. Albert Shaw, another American, gives an account of the working of municipal institutions in Great Britain. It is a record of observed and noted facts taken from contemporary civic life in a land which is not Utopia and where none of the other conditions mentioned by Mr. Francisco as essential to the effective realization of his initial stipulation is either suffered or wished for.

"The first question to be asked with regard to municipal government is: What does it mean? The age is past when self-centered philosophers thought they were doing the world some service by asking questions about government, social life, and similar matters, only to answer them by proposing, upon general principals and the 'laws of reason,' some solution evolved from their own inner consciousness for the problem suggested by the inquiry. Those who would serve their generation to this end now proceed by a different way. When any one asks nowadays what is municipal government, the approved manner of answering is to refer to examples of what is practically understood and done under the name by those communities who have given proof of knowing most about the subject. Occasionally such information is supplemented, as in the case of Mr. Francisco's article, by references to examples illustrative of 'how not to do it.' Both kinds of teaching are valuable in their way. * * * * * * * * *

In the beginning of a study of such writings as those of our two writers upon municipal government, we are confronted by the admission of the one that the term 'would seem ill-adapted to embrace at once the mechanism and the varied tasks of modern municipal corporations'—that is of Great Britain; whereas the other declares roundly that municipalities should 'confine their business to regulating and governing'—that is in the United States. * * * * * *

The further question arises as to whether such circumscribed bodies are really fit to bear the limited responsibilities thus contemptuously left to them, and the answer is not at all a reassuring one. If it were certain that a civic body confined to the performance of its elementary duties of 'regulating and governing,' as Mr. Francisco puts it, was competent to bear this responsibility as it ought to be borne, there would be no particular reason for the limitation. If, on the other hand, the multiple-functioning municipality failed of its elementary duties in government, there would be excellent reasons for cutting down its activities to those of the first importance."

Electrical Industries, Chicago, says: "Few men have made so careful a study of the Municipal Ownership of electric lighting plants as Mr. Francisco, who, through an extended experience in the management of electric lighting central stations, has gained a thorough knowledge of the practical side of the subject. He is thus able to point out many of the fallacies of Municipal Ownership. Numerous examples of unsuccessful enterprises are cited, showing the absence of economical management and pointing out the uselessness of engaging in pursuits other than

those for which the public organization was created. The opinions of many well-known men are given on this subject. The statistics and figures taken from the actual records of the plants are the most convincing. In parallel columns are placed lists of municipal and private plants in the same locality with the cost per candle-power hour and the number of candle-power hours received for one cent. The conclusion at once drawn indicates that the public can purchase its lights cheaper than the city can produce it. A list of municipal plants is also given with notes describing the cost of installation, size and various other facts regarding them. The book might well be studied by City Councils contemplating the establishment of a public central station. It shows the faults in many existing plants. This volume will interest all to whom the subject of Municipal Ownership has been presented. While it presents but one side of the subject, and whether that side be right or wrong it is well to know it. The bright, enthusiastic pictures painted of municipal plants would lose some of their brightness if painted with colors from this book."

The **Liberty Review**, of London, Eng., says: "The fallacies of Municipal Ownership are thoroughly exposed in a pamphlet just issued by Mr. M. J. Francisco of Rutland, Vermont. The question is treated with especial reference to the experiences in electric lighting of various towns in the United States. In support of Municipal Ownership and management of gas and electric plants the argument advanced is, that better results would be secured with less expense. The author proceeds to show that this argument is in contradiction to the actual experience of practical men, and will not stand the test of the result of the many experiments already tried, and that, although no satisfactory proofs have been proffered by its advocates, there exists abundant testimony against the wisdom of such action. A warning precedent is found in the disastrous result of the Massachusetts investment in railroads, which caused nearly one-half of the state debt.

"For the socialists and advocates of municipal trading, argue that the duty of the state is to set an example of fair wages and short hours, and to supply work for its unemployed. We shall be grateful to Mr. Francisco if, at no very distant date, he finds himself in a position to supply us with such indisputable facts as will at once effectually disprove these mistaken—nay more, these pernicious—ideas concerning the state as an impovident trader."

The **Electrical Engineer** of New York, says: "Addressing himself once again with undiminished zest to the fight against the Municipal Ownership of electric lighting plants, Mr. Francisco has brought out another edition of his pithy and effective pamphlet, revised up to date. The merely argumentative part of the test is now supplemented by a number of legal and editorial opinions on the subject, as well as by useful tables showing the real cost of lights as furnished by private companies and municipal plants.

"Such literature cannot have too wide a circulation. The tendency to divert public funds raised by taxation into the channels of specific commercial enterprises is strongly pronounced, and it is based upon the fallacious supposition that by means of such expenditures, cities can add to their income and also lighten the general burden of taxation. The theory is pretty but it rarely works out well. Mr. Francisco, who has made a close study of all points of the subject, holds that no municipal plant can pay; at least we believe that to be his bottom conviction on the subject. It might be admitted that one or two plants of this nature are profitable, and the argument against them remains as strong as ever, for some of the instances to the contrary present failures that are simply stupendous. Indeed, it is one of the saddest spectacles of modern times to see how the load of public indebtedness is growing in the various civilized countries, and quite as much from state and municipal enterprises as from preparations for war. If the standard of performance improved with the increase of debt, there might be some consolation, but the various recent investigations in different cities reveal waste, extravagance, mismanagement and dishonesty that are positively appalling."

of an article on Municipal Ownership published in the December number of "Municipal Affairs."

In opposing Municipal Ownership it is assumed that the functions of a municipality are to govern and control. To govern successfully requires that one shall be wholly disinterested; ownership implies the greatest self-interest. Therefore the two propositions are directly antagonistic.

The founders of this government never intended that its functions should be extended so as to embrace speculative ventures or commercial industries. If the state and municipalities had a right to assume all these powers, they could manufacture and sell all goods and wares, and control all business enterprises. This system would destroy competition, stop development and invention, make the active, restless freeman a helpless dependent upon the state or municipality.

The assumption of such authority by municipalities and the operation of commercial ventures and speculations lead to paternalism, from that to imperialism and then anarchy.

Why is Municipal Ownership desirable? Is it for profit? If so, the city abandons its governing power for which it was created and becomes a speculator and a competitor for gain, making some of its own citizens its victims.

On the other hand, if it is advocated as a protection to the citizens, who does it protect? Not the masses who are here one year and away the next. How then are they benefitted by Municipal Ownership? How does it help the property owner or business man when it is brought into direct competition with him, not only that, but compels him to pay a higher tax to aid the municipality in destroying his own property?

What is the difference or distinction between property interests in gas or electric light works and other property located in a city? If the municipality can and should seize upon one, why not all?

They say electric companies' rates are excessive. Why not say the prices charged for boots and shoes, coal, groceries and all other necessaries are excessive, and therefore the municipality must assume the business and enter into competition with the owners, reducing the price now charged? Is it not just as equitable, and have they not the same rights in both cases?

It is unnecessary to spend time in discussing the political phase of the subject.

Any one at all familiar with the working of American politics knows full well that "To the victor belongs the spoils." The friends and followers of the victorious candidate must be provided for. The result is frauds, political corruption and high taxes. Such is the history of every city from the Atlantic to the Pacific coast.

By adding the departments of gas, electric lighting, street railways, telegraph, telephone and many other industries, with an army of thousands of officials and employes necessary to manage these various industries, the municipality would be so unwieldly under the management of inexperienced politicians that there could be no accountability, no economy, and it would immediately become the prey of human rapacity.

The American of Philadelphia well said: "It is a sort of temporary clearing house for political bosses, and

its settlements are in the nature of rewards bestowed with reference not to individual deserving, and not with reference to the public good, but for services rendered to individuals chiefly upon their petty aggrandizement."

A ward politician cannot usually be transformed in one year into a railway manager or an electrician. At the present day all occupations of profit require ability, experience, if not genius, to succeed. How then can we expect such qualifications from politicians whose term of office is for one year ?

It is a peculiar fact that nearly all the advocates of Municipal Ownership are politicians who are working for a re-election to office, or rank socialists and college theorists without any experience in the business world with its myriad ramifications, and also a very limited knowledge of the science of finance.

A new advocate of Municipal Ownership has appeared who poses as a teacher in one of the colleges. He admits that he knows nothing about the business of electric lighting, still he attempts to teach it to others, and displays his theoretical ideas in articles for papers who favor Municipal Ownership. Evidently the object being to try and secure some of the pickings from political and labor organizations. He announces in this magazine article that Francisco's figures and statements are juggled and not worth considering, then occupies part of ten pages in references to them, even going into personalities to vent his spleen.

He says, " private parties should be encouraged to push forward in all the untried fields. If their ventures are unsuccessful, failure and bankruptcy will effect only them and their immediate dependents."

This is the economic plan of such socialists. *The private company should be encouraged to venture and invest their money in the experiment, and if it proves a failure, let them suffer ; but if it happens to prove a success, then as soon as it is known that such success is certain, the municipality*

should step in and avail themselves of the experience of the private company and establish Municipal Ownership, thus entering into competition with their own citizens, and not satisfied with appropriating, without any return, the knowledge which the private company has spent years and large amounts of money in obtaining, tax their property to raise funds to be used in destroying their business.

It is claimed that "so far as the experimental character of the industry is concerned, electrical progress has reduced electric lighting to a system, and that now it can be as easily calculated as any function in which cities are engaged."

Any manager of an electric light plant knows that less than three years ago an invention was perfected that revolutionized the business and virtually sent apparatus, costing hundreds of thousands of dollars to the scrap pile.

Gas had been manufactured for half a century and the conditions necessary to produce it were thoroughly understood, and had been for years before the municipal gas plant was established in Philadelphia.

That city has tried the practical working of a commercial industry, and after thirty years experience and a loss of millions, abandons it in disgust, and turns the property over to a private corporation.

The march of improvement is striding onward and in a few years, if present indications are to be relied upon, we will see the apparatus in use to-day discarded as worthless. Then where will be the money which the taxpayers have invested in these experiments?

We were furnished with some astounding statements in articles published in the *Arena* made up of wild theories, in which it was evidently the author's aim to see how many pages he could produce "without saying anything." The article in the last issue of *Municipal Affairs* is a repetition of the *Arena* statements, and these articles and his own assumptions appear to be his only authority for the figures used in trying to discredit Francisco's statistics.

He says: "Francisco appears to have visited but one of the 64 plants tabulated in his pamphlet."

How does this learned economist know what Francisco has been doing during the past ten years; what means has he of knowing how many plants have been visited?

Are all of his estimates and tables as reliable as this statement and based upon the same assumption with no other evidence to sustain them?

Francisco has for twelve years managed and operated an electric light plant, has found by actual experience just how long electric apparatus will last. Has paid the bills for repairs that had to be made. Has seen lightning destroy a thousand dollars worth of electrical machinery in the twinkling of an eye.

Has used the engines and boilers which we are told by these theorists are good for 25 or 30 years.

Has experimented upon and tested electrical apparatus of all kinds.

Traveled 4,000 miles on one trip examining electrical plants, and has examined city records and reports for years. It is upon such personal knowledge and experience that he bases his statements, not upon guess work or theory as this neophyte admits he has done.

He says:

"The village of Batavia, N Y., owning and operating its waterworks system decided in 1893 to add an electric lighting outfit to the plant. An addition was made to the waterworks building for the electrical machinery and a new boiler was erected.

"Two engineers at $65.75 per month each had been all the force needed for the waterworks. For electric lighting there were added one electrician at $65, one trimmer at $45 and one fireman at $45 and the engineers' salaries were increased $5 each per month, making the total additions $165 per month, $1,980 per year or $19.22 per arc lamp per year."

To what does the above statement amount? Is it not intended to give the public the impression that $19.22 per lamp covers the entire expense to the taxpayers of those lamps?

He says they purchased a new boiler, built an addition to the station, but nothing is said about their cost and no intimation is given that they had to buy electrical apparatus, or that any coal was used or carbons for their arc lamps. For the full facts regarding Batavia reference is made to page 61 of this work.

Dunkirk is cited and he makes the statement that the total "extra expense for electric lighting has been figured at $913.62."

In this statement the public are told that the only expense of an electric light plant, if run in connection with with waterworks, is the labor; therefore in the case of Dunkirk, by the figures of this learned theorist, it only costs $913.62 a year in addition to what it would have cost if there had been no electric plant and the waterworks were operated alone.

On the 71st page is a full history of the business at Dunkirk.

This economist says: "The dynamos are run at 18 amperes and 520 watts are delivered to each lamp."

The *Arena* man, whom he quotes as authority, says they only furnish 480 watts.

How does this visionary theorist, dealing with fancies and not with facts, know that 520 watts are delivered to the lamps? Has he tested them or does he know anything about the voltage or amount of current flowing at each lamp?

The statement he makes indicates his entire ignorance of the business.

All practical electric light men know that there is no way of telling what the voltage of a lamp is except by testing each lamp while burning.

The fact that a dynamo is generating a certain number of volts does not prove that there are 520 watts at each lamp. The statement that citizens can tell what candle power a lamp is furnishing by looking at the light is too ridiculous to consider.

Advocates of Municipal Ownership proclaimed that the total cost of producing light in the Municipal plant at Chicago did not exceed 19 cents per night per lamp. In 1890 I made an examination of their plants, giving the result of my investigation in a paper read at the Cape May convention. The city electrician of Chicago was present and declared upon the floor of the convention that my statement was false, and the cost of the lights in Chicago was less than 19 cents per night.

He was given 30 days to prove his statement; this time was afterward extended to 60 days. But he was unable to do so and never has substantiated the statement made at that time. He knew the figures I had given were correct and could not be disproved and so employed the usual plan of bluff.

When the new controller of Chicago was elected in 1894, he called upon this same city electrician for a report of cost of producing the lights and the report then made exposed the false reports that had been circulated regarding Chicago's lights and it was found that the cost for labor and material alone amounted to $96.64 per lamp per year, and in this labor account nothing was included for the office help or the superintendent's salary. When the other expenses were added it showed that the electric lights were costing the taxpayers $168 per lamp per year.

The system established under municipal management was disclosed when it was found that the city superintendent was buying supplies and apparatus for the benefit of the superintendent rather than the taxpayers.

In the investigation made it appeared that the extra cost to the city on purchases made amounted to $20,163.20

on lamp posts alone. It also showed that the cost to the city of setting poles was an average of $13 for each pole, while other concerns in the city paid $4.92 per pole.

With such records from these cities this theorist says: "Francisco is continually insisting on the duplicity of municipal officials."

It seems to surprise this advocate of Municipal Ownership that any one should object to such peculations.

The New York *Tribune* well says a municipal department is controlled not by business principles but by politics, a synonym of rascality.

Francisco's statistics, he says, are incorrect because they do not agree with the articles published by an advocate of Municipal Ownership in the *Arena*.

They would not be very apt to agree because the former's figures give the facts and actual experience of Municipal plants and the latter a long string of wild, unreliable figures regardless of the facts shown by the cities' records or experience with nothing to sustain them except the assertions of this neophyte.

As a sample of the statements made by such parties we quote: "Cost of street lamps in Swanton for 2,000 candle power all night, moonlight schedule, $10 per year. $10 for nearly the same service that costs Boston $139 per lamp." Here we have the statement of an pettifogger which is endorsed by this theorist.

The practical workings of the municipal plant at Swanton is shown on page 101 of this book.

It is claimed that the "total cost of production under complete public ownership at Little Rock is $50 per lamp per year."

On the 80th page of this work will be found a copy of the city clerk's reports and records. Being unable to disprove the facts there shown, this academic theorist pronounces it "Francisco's juggling with the figures."

This is the plan adopted by such socialists when they find stubborn facts proving the falsity of their position, which cannot be denied, to call it "juggling the figures."

Doubtless now they will call the record of the municipal gas plant in Philadelphia "juggling the figures" because they abandoned the business. As the *Daily Eagle*, of Brooklyn, says; "The principal opposition to turning the plant over to a private corporation comes from academic theorists who did not want to confess that the experiment of public ownership and operation had been a disasterous failure."

Why is it that he fights so shy of the records of municipal plants in Massachusetts? He does not seem to know of any such business in that state.

The reason is patent. Massachusetts has a commission and all companies, both municipal and private, are compelled to give detailed reports to this commission, and the damaging facts there shown cannot be called "juggling the figures." Therefore he takes cases where the public do not have a chance to examine the returns.

By examining the reports on pages 50, 56, 74, 87, 98 and 99, the reason for ignoring Massachusetts plants will be plainly disclosed.

He says: "Francisco claims operating expenses and repairs are charged as new construction and to other accounts. Such evidence as I have been able to get seems to show that he is the wildest sort of a Don Quixote."

This academic theorist is one of that numerous class of socialists "who know so little that is so, and so much that is not so."

The statement of the superintendent of the municipal plant at Alleghany, on page 51, shows conclusively some of the things that this theorist don't know.

In the report of the Engineer Commissioner of the District of Columbia 51st Congress, depreciation was

figured at 10 per cent on the entire cost of the plant. The experts employed by the mayor of Springfield, Ill., made it 10 per cent.

The manager of the municipal plant at Marietta, Ohio, and the electrical engineer who installed the plant at Ypsilanti, both claim 10 per cent.

The experts at the Philadelphia investigation made it 10 per cent. The mayor of Decatur, Ill., after several years' experience, says 10 per cent is low.

The best experts in England state that 10 per cent is as low as it can be calculated.

The actual experience of companies in the business shows that in ten years the plant must be renewed.

Little Rock had to replace their plant after using it only five years.

At Bay City, after only six years, the superintendent reported to the Council as follows: "It will be absolutely necessary to rebuild arches and we ought to have a new engine."

Xenio, Ohio, had to abandon their engine and buy a new one after seven years' use, and then sold the plant which cost them $35,000 for $10,000 and abandoned the business.

Alemeda sold apparatus that cost $20,000 after seven years use for $350.

Bloomfield, Iowa, purchased dynamos in 1891. In 1896 these failed and had to be replaced with new ones at an expense of $5,000.

The mayor of Rock Falls, Ill., after an experience with municipal plants, says 10 per cent is none too high.

Hon. T. E. Barker, chairman of the gas and electric light commission of Massachusetts, and whose knowledge and experience are beyond question, says:

" Depreciation should not only account for the actual deterioration of the apparatus due to its use, but should include the reduction in the market price of apparatus, and the loss upon apparatus which becomes commercially

useless through the progress of the art, as well as those appliances which may become valueless, not because they are worn out or out of date, but because the growth of the business in that particular locality makes it no longer economical to use them, and although in condition to do the work for which they were originally designed, nevertheless become practically useless through the necessity for a reconstruction or rearrangement of the works to meet new conditions."

These theorists tell us interest should not be considered in estimating the expense of a municipal plant. The sophistry of such argument is plain.

The city authorities compel the taxpayers to contribute $100,000 to build a plant. This plant gives no return to the city except the light it produces.

In meantime they levy another tax to secure money for the operating expenses. Suppose instead of putting this $100,000 into an electric plant, they had loaned it upon a good mortgage or purchased bonds, would not the interest on this money be paid into the city treasury every year, and thus would yield an income that could be used for city expenses and reduce the amount that would have to be raised by taxation. Therefore every taxpayer would receive his proportion of the interest, and his tax be that much less. Besides with this money at interest, the investment would be good for its face and could be called in at any time, but when it is invested in an electric plant, the property is wearing out all the time and at the expiration of a few years is worthless, and the city has nothing to show for its investment.

He refers very gingerly to Hamilton, O. Why did he not quote the city clerk's statements, referring to interest, in which he says: "Hamilton is being devoured whole by its interest charges. During the coming year the interest owing by the city and bonds to be paid will amount to nearly 90 per cent of the entire reve-

nue of the city. We have had theory long enough and we must meet the condition."

Hamilton has a municipal gas as well as an electric light plant on their hands, and they are also wrestling with an application in the courts for a receiver for the city because they cannot pay their bills, and all these things have been brought about under the benign influence of Municipal Ownership.

The *Times-Star* of Cincinnati well says: "An argument against the socialistic idea of Municipal Ownership is the fact that no account is taken of the interest on the investment, neither an account of the deterioration of the plant—two important factors which every careful manager figures on at the beginning of his calculations." On page 75 will be found a history of Hamilton's experience, showing the results of adopting these wild theories.

This socialist says: "That the saving effected in arc lighting within a few years is 40 per cent of the maintenance. Were the business a competitive one and readily open to new companies, there could be no question that the private plants installed a few years ago would all now be bankrupt, in so far as they have not met the improvements of the day by substituting new machinery."

How about the municipal plants installed during the past ten years? The same rule I suppose does not apply to them, because the taxpayers can be bled indefinitely. If his assertion, as quoted above, is true, how does he reconcile it with his previous statement about depreciation. He says plants ten years old are antiquated and parties cannot afford to use them. Precisely what we have claimed: that there must be enough charge off for depreciation to replace the plant every ten years; and this applies to municipal plants as well as private corporations.

But, says this economist, supposing there is a depreciation in the municipal plant; suppose the whole plant, costing half a million, is lost, "all that is necessary to do is to levy a tax and

replace it, and the tax each one would be called upon to pay would be so small that it would not be noticed." This theory covers the whole ground; it is taxpayers' money, therefore free, and even if it is squandered right and left, there is plenty more where that come from.

The *Times-Herald* of Chicago truly says: "Before we can have Municipal Ownership of public entities, there must be a complete and radical change in our form of municipal government."

And the *Commercial Advertiser* truly adds, "that municipal socialism inaugurates a reign of waste, inefficiency and corruption."

Advocates of Municipal Ownership claim that private ownership produces corruption. That is, the corruption, fraud and political demoralization in every city of the United States, they say has been caused by the acts of private corporations. All of the office holders, ward heelers and bosses, together with their followers, were honest, upright men until these vile corporations demoralized them through bribery. This caused all of the disasters and misrule under which the cities are now suffering. Therefore if you only curb and destroy the private corporations, by some peculiar dispensation of politics the political rings, boodlers, ward heelers and bosses will disappear. They will be converted into upright, Christian men, who will be no longer tempted by the managers of private corporations, now being entrusted with the entire management of millions, it will cause their consciences all of a sudden to bloom into sensitiveness, so that they will be willing to guarantee that the taxpayers will not be swindled beyond what is absolutely necessary to keep their political bosses properly supplied with requisite funds. They say this plan will prevent these men from doing that which they notoriously go to the Council for the purpose of doing.

The *Ledger* of Philadelphia, referring to the municipal gas plant, says: "To get rid of this venal and cor-

rupt political machine would be to take a long step toward good municipal government, as it would be to destroy the strongest and most dangerous of all the political jobbers' strongholds."

Would it not prove more beneficial if some of the reform leagues, clubs and societies who are devoting so much time and money antagonizing municipal interests and private corporations to strike at the root of the evil by placing men in office whose character and records would insure good, honest government, with power to control the cities' affairs and make such ordinances as might be necessary to insure the proper control of private corporations?

Not only the municipalities but the states are largely indebted to the influence and capital of these private corporations for their success and prosperity.

Who have laid the net-work of rails covering the entire continent and costing millions upon millions?

Private Corporations.

Who have studded every sea and ocean with their moving palaces?

Private Corporations.

Who enabled Chauncey M. Depew to sit at his desk in New York and flash a message around the world, over 24,500 miles of line, and receive an answer in less than twenty-two minutes?

Private Corporations.

Who gave the world a track by which man was enabled to throw his voice across space for thousands of miles?

Private Corporations.

Who distribute the millions of letters into the remotest parts of the earth?

Private Corporations.

Who bring the commerce of the nations to our doors?

Private Corporations.

Who, in fact, have made the world's industries what they are ?

Private Corporations.

Who have covered every part of this country with lights that almost rival the sun?

Private Corporations.

Why, then, this hue and cry against Private Corporations? Suppose they, with all the benefits they have conferred, were instantly wiped out and destroyed, would it not roll the world's progress back nearly two centuries?

Then let the States and Municipalities govern and control them wisely, as it was designed they should be controlled, and cherish and aid them so that the wonderful record of the past century may be even surpassed by future generations.

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